

**THE DYNAMICS OF INTIMATE PARTNER
VIOLENCE DURING PREGNANCY AND
LINKAGES WITH HIV INFECTION AND
DISCLOSURE IN ZIMBABWE**

By

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**A thesis submitted in fulfilment of the requirements for the awarding of a
DOCTOR OF PHILOSOPHY Degree in Public Health at the School of Public Health
in the Faculty of Community and Health Sciences, University of the Western Cape**

27 February 2013

DECLARATION

I declare that “The dynamics of intimate partner violence (IPV) during pregnancy and linkages with HIV infection and disclosure in Zimbabwe” is my own work, and that all the sources I have used or quoted have been indicated and acknowledged as complete references. The thesis is simultaneously being submitted for examination, through the School of Public Health, Faculty of Community and Health Sciences of the University of the Western Cape (South Africa) and Faculty of Medicine and Health Sciences of Ghent University (Belgium) under the Memorandum of Understanding of collaboration between the two universities, as a joint/dual PhD degree.

This thesis is written in monograph format with results (Chapters 5-9) written in the form of five manuscripts which have either been published, in press or submitted for publication. All papers are included and reprinted with the copyright holders’ permission. This serves to confirm that I am listed in all the manuscripts as the first and main author. Below is the list of papers:

Paper I: Shamu S, Abrahams N, Temmerman M, Musekiwa A, Zarowsky C (2011) A systematic review of African studies on intimate partner violence against pregnant women: prevalence and risk factors. PLoS ONE 6(3): e17591. doi:10.1371/journal.pone.0017591

Paper II: Shamu S, Zarowsky C, Shefer T, Abrahams N, Temmerman M. (2013). Intimate partner violence during pregnancy in Zimbabwe: A Cross-sectional study of prevalence, predictors, and associations with HIV. Tropical Medicine and International Health doi:10.1111/tmi.12078

Paper III: Shamu S, Zarowsky C, Shefer T, Temmerman M, Abrahams N. Intimate Partner Violence (IPV) after disclosure of HIV test results among pregnant women in Harare, Zimbabwe. Submitted to WHO Bulletin on 10 November 2012.

Paper IV: Shamu S, Abrahams N, Temmerman M, Shefer T, Zarowsky C (2012) “That pregnancy can bring noise into the Family”: Exploring intimate partner sexual violence during pregnancy in the context of HIV in Zimbabwe. PLoS ONE 7(8): e43148. doi:10.1371/journal.pone.0043148

Paper V: Shamu S, Abrahams N, Temmerman M, Zarowsky C. (2013). Opportunities and obstacles to screening pregnant women for intimate partner violence during antenatal care in Zimbabwe. Culture Health and Sexuality. <http://dx.doi.org/10.1080/13691058.2012.759393>



Signed

Simukai Shamu

Date: 27 February 2013

DEDICATION

Kuna mai, mudzimai wangu nevanhukadzi vose.

To my mom, my wife and all women



TABLE OF CONTENTS

| CONTENTS | PAGE |
|---|------|
| DECLARATION | 2 |
| ACKNOWLEDGEMENTS | 8 |
| LIST OF ACRONYMS..... | 12 |
| ABSTRACT..... | 14 |
| Chapter One..... | 16 |
| INTRODUCTION..... | 16 |
| 1.1 Background | 16 |
| 1.2 Problem statement | 18 |
| 1.3 Relevance of the study..... | 22 |
| 1.4 Aim and objectives of the study | 23 |
| 1.5 Study hypotheses..... | 23 |
| Chapter Two..... | 25 |
| LITERATURE REVIEW | 25 |
| 2.1 Introduction | 25 |
| 2.2 Defining intimate partner violence (IPV) | 25 |
| 2.3 Global variations in IPV research during pregnancy..... | 29 |
| 2.4 Why focus on pregnant women?..... | 33 |
| 2.5 Association between IPV and HIV | 35 |
| 2.6 The health sector and IPV | 37 |
| 2.7 Relationship between HIV disclosure and IPV | 39 |
| 2.8 Risk factors for IPV and HIV | 40 |
| 2.9 Relationship between child abuse, forced first sexual experience and adult violence | 42 |
| 2.10 Gender-based-violence and gender inequity | 43 |
| 2.11 Socio-economic, political and health situation in Zimbabwe | 44 |
| 2.12 HIV prevalence in Zimbabwe | 46 |
| 2.13 Gender inequality, IPV and HIV risk in Zimbabwe | 47 |
| 2.14 Theoretical and conceptual frameworks | 50 |
| 2.14.1 Feminist perspectives on violence against women | 50 |
| 2.14.2 Social learning theory | 52 |
| 2.14.3 The ecological approach to IPV..... | 53 |

| | | |
|---|---|-----|
| 2.14.4 | Theoretical framework..... | 53 |
| Chapter Three | | 57 |
| METHODOLOGY | | 57 |
| 3.1 | Introduction | 57 |
| 3.2 | A mixed methods paradigmatic approach..... | 57 |
| 3.3 | Study setting | 59 |
| 3.4 | Ethics..... | 61 |
| 3.5 | Systematic review methods..... | 61 |
| 3.6 | Analysis of systematic review data | 63 |
| 3.7 | Qualitative research..... | 64 |
| 3.8 | Focus group discussions (FGDs) | 65 |
| 3.9 | Interviews with health workers | 67 |
| 3.10 | Analysis of qualitative data | 68 |
| 3.11 | Quantitative survey..... | 70 |
| 3.12 | A cross-sectional study | 71 |
| 3.13 | Sampling procedures | 71 |
| 3.14 | Questionnaire design | 72 |
| 3.15 | Variables and measurements | 73 |
| 3.15.1 | Conducting the interviews..... | 76 |
| 3.16 | Review of clinical records..... | 78 |
| 3.17 | Analysis of quantitative survey data | 79 |
| Chapter Four | | 82 |
| FINDINGS..... | | 82 |
| 4.1 | Summary of findings | 82 |
| 4.2 | The organisation of the findings section..... | 85 |
| 4.3 | List of PhD manuscripts..... | 86 |
| Chapter Five | | 87 |
| PAPER I: A SYSTEMATIC REVIEW OF AFRICAN STUDIES ON INTIMATE PARTNER VIOLENCE AGAINST PREGNANT WOMEN: PREVALENCE AND RISK FACTORS | | 87 |
| Chapter Six | | 115 |
| PAPER II: INTIMATE PARTNER VIOLENCE DURING PREGNANCY IN ZIMBABWE: A CROSS-SECTIONAL STUDY OF PREVALENCE, PREDICTORS, AND ASSOCIATIONS WITH HIV..... | | 115 |
| Chapter Seven | | 145 |



| | |
|---|-----|
| PAPER III: INTIMATE PARTNER VIOLENCE (IPV) AFTER DISCLOSURE OF HIV TEST RESULTS AMONG PREGNANT WOMEN IN HARARE, ZIMBABWE | 145 |
| Chapter Eight | 163 |
| PAPER IV: “THAT PREGNANCY CAN BRING NOISE INTO THE FAMILY”: EXPLORING INTIMATE PARTNER SEXUAL VIOLENCE DURING PREGNANCY IN THE CONTEXT OF HIV IN ZIMBABWE | 163 |
| Chapter Nine | 192 |
| PAPER V: OPPORTUNITIES AND OBSTACLES TO SCREENING PREGNANT WOMEN FOR INTIMATE PARTNER VIOLENCE DURING ANTENATAL CARE IN ZIMBABWE | 192 |
| Chapter Ten..... | 215 |
| DISCUSSION..... | 215 |
| 10.1 Introduction | 215 |
| 10.2 Dynamics of IPV in pregnancy..... | 215 |
| 10.3 Pregnancy as a vulnerable period?..... | 220 |
| 10.4 The relationship between gender equity and IPV | 222 |
| 10.5 IPV, HIV and sexual risk..... | 228 |
| 10.6 Intimate partner violence and the health system | 232 |
| 10.7 Past abuse and abuse in pregnancy..... | 234 |
| 10.8 Challenges of researching gender-based-violence during pregnancy | 236 |
| Chapter Eleven..... | 240 |
| CONCLUSIONS..... | 240 |
| 11.1 Conclusion..... | 240 |
| 11.2 Strengths of the study..... | 242 |
| 11.3 Study limitations | 243 |
| 11.4 Recommendations and policy implications of the study..... | 245 |
| 11.4.1 Primary prevention of violence in the family and at school | 245 |
| 11.4.2 Secondary prevention of violence through the Health system | 246 |
| 11.5 Further research | 248 |
| 11.6 Next Step: Dissemination and advocacy work..... | 248 |
| 12. REFERENCES | 250 |
| 13.0 APPENDICES | 268 |
| Appendix A: Ethical Considerations | 268 |
| Appendix B: Ethics Approval from the Joint Parirenyatwa Hospital and College of Health Sciences Research Ethics Committee | 271 |
| Appendix C: Ethics Approval from the Medical Research Council of Zimbabwe..... | 272 |

Appendix D: Ethics Approval from the University of the Western Cape Senate Research Committee 273

Appendix E: Permission to conduct the study at Harare City Health Clinics 274

Appendix F: Participant Information Sheet 275

Appendix G: Consent Form 278

Appendix H: Assent Form (15-17 years) 279

Appendix I: Focus Group Guide 281

Appendix J: Interview Guide for Health Workers 283

Appendix K: Women’s Health Study Questionnaire 285

Appendix L: PhD Conference papers and posters..... 309

Appendix M: Papers published, in press or submitted 310



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Thus far the Lord has taken me!

LIST OF ACRONYMS

| | |
|-------|---|
| AAS | Abuse Assessment Screen |
| AIDS | Acquired Immune Deficiency Syndrome |
| ANC | Antenatal Care |
| ART | Antiretroviral Therapy |
| ARV | Antiretroviral |
| CI | Confidence Interval |
| CSO | Central Statistical Office (now ZIMSTAT) |
| CTS2 | Conflict Tactics Scale version 2 |
| DBBS | Dynamics of Building a Better Society |
| DHS | Demographic and Health Survey |
| FGD | Focus Group Discussion |
| HIV | Human Immunodeficiency Virus |
| IMAGE | Intervention with Microfinance for AIDS and Gender Equity |
| IPV | Intimate Partner Violence |
| MDG | Millennium Development Goal |
| OR | Odds Ratio |
| PMTCT | Prevention of Mother- to-Child (HIV) Transmission |
| PNC | Postnatal Care |
| RR | Risk Ratio |
| SRBQ | Sexual Risk Behaviour Questionnaire |
| SRPS | Sexual Relationship Power Scale |
| STD | Sexually Transmitted Disease |
| STI | Sexually Transmitted Infection |

| | |
|----------|--|
| UK | United Kingdom |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| USA | United States of America |
| VCT | Voluntary Counselling and Testing |
| VLIR-UOS | Flemish Interuniversity Council (Vlaamse Interuniversitaire Raad) - University Development Cooperation (Universitaire Ontwikkelingssamenwerking) |
| WHO | World Health Organisation |
| ZDHS | Zimbabwe Demographic and Health Survey |
| ZIMSTAT | Zimbabwe National Statistics Agency |



ABSTRACT

Introduction: The study assessed the linkages between HIV infection and intimate partner violence (IPV) during pregnancy and after HIV status disclosure in a context where HIV testing has become almost mandatory through the provider-initiated counselling and testing approach and non-disclosure of HIV status to sexual partners has been criminalised in many countries including Zimbabwe. The study also explored women's experiences of and health workers' perceptions of IPV during pregnancy.

Methods: A mixed-methods study of IPV and HIV during pregnancy was conducted to determine the prevalence of and risk factors for IPV during pregnancy and after disclosing HIV status, to assess the relationship between HIV, pregnancy and IPV, to understand women's perspectives of and midwives' experiences of responding to IPV during pregnancy. A systematic review and meta-analysis of 19 African studies on IPV during pregnancy was first conducted to understand the rates of and risk factors for IPV including HIV and to assist in developing a study of IPV and HIV during pregnancy in Harare, Zimbabwe. This was followed by qualitative research comprising seven focus group discussions (FGDs) with 64 pregnant and post-natal women; and in-depth interviews with seven senior maternity health workers from the six clinics involved in the larger quantitative research, and analysed with thematic content analysis of transcripts. The qualitative phase of the study explored IPV and linkages with HIV and helped to plan and to interpret the quantitative findings.

The last phase of the study was a cross sectional survey of 2042 postnatal women about their IPV experiences and sexual risk practices using an adapted WHO questionnaire and the Sexual Risk Behaviour Questionnaire. Respondents' antenatal HIV test results were collected from clinic records. The prevalence of IPV and that of HIV were calculated. A severe violence variable was constructed by calculating frequencies of IPV. Multiple logistic regression analysis was conducted to assess factors associated with experiencing IPV, severe IPV during pregnancy and severe IPV after disclosing HIV status.

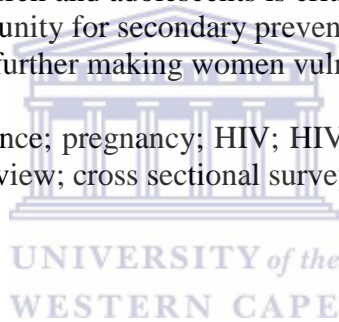
Findings: The systematic review found a significant variation in the prevalence of IPV during pregnancy (2% to 57%), attributed both to measurement differences and to probable real variations across countries. After adjusting for confounders, IPV during pregnancy was significantly associated with HIV (OR 1.48-3.10) and a history of violence (OR 2.43-274.34) in five out of eight studies while alcohol abuse by a partner was found to increase a woman's chances of being abused during pregnancy (OR 2.89-11.60). The survey found one of the highest rates of IPV ever recorded, with 63.1% of respondents reporting at least one of physical, sexual and/or emotional violence during their most recent pregnancy. High levels of emotional (44%), sexual (38.9%), physical (15.9%) and combined physical and/or sexual (46.2%) IPV were reported and this was confirmed in qualitative research. At least 30.2% reported severe sexual violence (3+ episodes) while 10.1% reported severe (6+ episodes) physical and/or sexual IPV during pregnancy. 95.5% disclosed their HIV test results to their partners. Overall HIV prevalence was 15.3%, but the prevalence among women who did not disclose was more than double (35.2%) the rate among women who disclosed to their partners (14.3%). About 3.5% of women who tested negative did not disclose, but 10.7% of those testing positive did not disclose ($p < 0.0001$). At least 40.5% of HIV positive women reported physical, sexual and/or emotional

IPV after disclosure, compared to 31.5% of women disclosing HIV negative results ($p=0.004$). HIV status was not significantly associated with IPV or severe IPV during pregnancy but with sexual risk factors. Other risk factors for IPV, severe IPV and severe IPV after HIV disclosure, include high levels of gender inequality, past violence (during childhood and adulthood), heavy alcohol use, lack of social support and partner control of woman's sexuality and reproductive health. Stronger associations were observed with severe IPV.

Institutionalised patriarchy, through the marriage institution, extended family, health system, and the church emerged as supporting and contributing to the abuse of women due to its promotion of gender inequality. Men reportedly failed or refused to accept the physical, emotional, economic and sexual changes associated with pregnancy leading to abuse of women. Midwives were not knowledgeable, equipped or supported by the health system to recognise and address IPV and perceived IPV as a domestic problem and not part of their clinical work.

Conclusion: A high prevalence of IPV was reported during pregnancy and after disclosing HIV status with more HIV positive women experiencing abuse than HIV negative women after disclosure. IPV is closely related to gender inequities between partners. The relationship between HIV and IPV is complex and prevention interventions of IPV and HIV must consider levelling gender inequalities. Targeting children and adolescents is critical in primary prevention while the pregnancy context offers an opportunity for secondary prevention in antenatal care. Disclosure of HIV should be conducted without further making women vulnerable to abuse.

Key words: Intimate partner violence; pregnancy; HIV; HIV status disclosure; gender inequity; sexual risk practices; systematic review; cross sectional survey; qualitative research; Zimbabwe



Chapter One

INTRODUCTION

1.1 Background

Of the 33 million people living with human immunodeficiency virus (HIV) worldwide, two-thirds (22 million) are in sub-Saharan Africa (UNAIDS 2010). UNAIDS estimates that in the 15-49 year age-group, Zimbabwe has the fifth highest HIV prevalence in the world (14.3%), after South Africa (17.8%), Lesotho (23.6%), Botswana (24.8%) and Swaziland (25.9%). Globally, more than half of the new infections occur among young people (15- 24 years) (UNAIDS 2010). The pandemic, however, is gendered. Of the 33 million people living with HIV, more than half are women. Young women constitute 75% of all new infections (WHO 2004). More women (17.7%) than men (12.3%) aged between 15 and 49 years were infected by HIV in Zimbabwe in 2011 (ZIMSTAT and ICF 2012). In addition, young women (15-24 years old) are at up to six times at greater risk of HIV infection compared to their male counterparts (Rosenberg 2002).

Many UN organisations including the WHO argue that the deep rooted and pervasive gender inequalities are responsible for the high and accelerated prevalence of HIV among women (WHO 2004). The same has been echoed by the National AIDS Council of Zimbabwe (NAC 2006). Intimate partner violence (IPV) has been considered by researchers as a proxy for gender inequality and has been used in analysing the relationship with HIV. In sub-Saharan Africa, studies of the relationship between IPV and HIV have been conducted in a few countries including Tanzania, Uganda, South Africa and Rwanda. Studies in these countries found up to a threefold increase of HIV risk among women exposed to IPV when compared to those who had not been exposed to IPV (Maman, Mbwambo *et al.* 2002, Dunkle, Jewkes *et al.* 2004, Karamagi,

Tumwine *et al.* 2006, Ntaganira, Muula *et al.* 2008). There has been little research conducted in Zimbabwe on the link between HIV and IPV.

The WHO Division of Gender and Women's Health identified five ways in which HIV infection may be linked to IPV (WHO 2004). Forced sex may directly increase a woman's risk for HIV through physical trauma; violence and the threat of it may limit a woman's capability to negotiate safer sex (such as condom use); partnering with risky and/or older men exposes women to greater risk of IPV; sexual abuse during childhood may lead to increased sexual risk-taking in adulthood and finally, women who test for HIV and share the test result especially a positive result may be in danger of violence from their partners. In addition, gender-based-violence limits access to and participation in HIV prevention programmes such as voluntary counselling and testing (VCT), prevention of mother to child transmission (PMTCT), sexually transmitted infections (STI) treatment, antiretroviral (ARV) treatment and formula feeding for babies (Maman and Medley 2004).

Violence against women is not only a public health problem, but also a social problem and a violation of human rights that include women's reproductive health rights (Heise, Raikes *et al.* 1994, Harvey, Beckman *et al.* 2002). It manifests itself in physical, sexual, emotional, or psychological and economic forms. It has diverse adverse health effects which are associated with a high use of health care services, long term physical and mental disabilities, poor health status and poor quality of life (Campbell 2002, WHO 2002, WHO 2005, Karamagi, Tumwine *et al.* 2007). In particular, forced sex may lead to STIs including HIV, vaginal bleeding, decreased sexual desire, genital irritation, pain when having sex, pelvic pain and urinary tract infections

(Campbell 2002). Despite all these direct and indirect adverse health outcomes of IPV and the strong relationship between HIV and IPV, it has received little attention from public health researchers in Zimbabwe. Understanding the connection between HIV and IPV helps to plan effective interventions that target reducing both IPV and HIV.

1.2 Problem statement

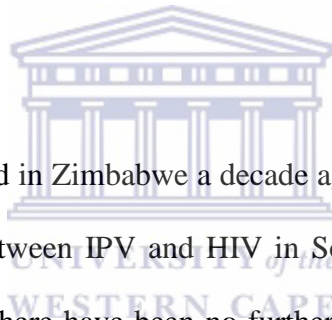
Most studies of the intersections between HIV and IPV in Sub Saharan Africa are community-wide population-based surveys (Watts, Ndlovu *et al.* 1997, Jewkes, Levin *et al.* 2003, Jewkes, Dunkle *et al.* 2006, Jewkes, Nduna *et al.* 2008, Sareen, Pagura *et al.* 2009) or studies among women attending VCT (Maman, Mbwambo *et al.* 2002, Vetten and Bhana 2001, Guedes 2004, Shefer and Foster 2009). Although these studies provide insight into the relationship between IPV and HIV in the general population, the associations between HIV and IPV during pregnancy may differ from the general population, due to the nature of relationships and women's economic, social and physical changes and vulnerability during pregnancy. A few studies investigating the relationship between HIV and IPV have been conducted among pregnant women (Koenig, Whitaker *et al.* 2002, Dunkle, Jewkes *et al.* 2004, Ntaganira, Muula *et al.* 2008). The understanding of the relationship between IPV and HIV is inadequate without discussing HIV status disclosure and IPV (Temmerman, Ndinya-Achola *et al.* 1995). Three reviews reporting on rates and outcomes of HIV status disclosure noted that disclosure rates ranged between 17% and 92% with higher rates found in the developed world signalling that disclosure was associated with access to psychological and institutional support (Maman and Medley 2004, Medley, Garcia-Moreno *et al.* 2004, Obermeyer, Baijal *et al.* 2011). The reviews also noted that a number of studies reported women experiencing positive support after

disclosure with a few women exposed to negative outcomes such as stigma, discrimination, rejection, divorce, or being chased from home. Of the 31 studies reviewed by Maman and Medley (2004), 26 mentioned some general negative effects without focusing on IPV as an outcome. There is therefore a lack of data related to the link between IPV and disclosure of HIV test results. This study investigates IPV after disclosure of HIV status to a partner.

The health system perspective, particularly maternal health workers' perceptions of IPV among women attending antenatal care has been researched in Western countries (Bacchus, Mezey *et al.* 2004, Edin 2006, Roelens, Verstraelen *et al.* 2008, Bacchus, Bewley *et al.* 2010) showing challenges of prevention interventions with pregnant women. However, the challenges would not only be different but of a different scale in African maternal health settings. An example of the major differences is that, maternal health settings in which most research has been conducted, were in Western countries and are generally managed by obstetricians and gynaecologists, compared to nurse midwives managing pregnant women in the African countries. Qualitative research to understand IPV during pregnancy in antenatal care settings and its understanding by antenatal care staff is only emerging in Africa (Laisser, Nyström *et al.* 2011, Undie, Maternowska *et al.* 2012). There is therefore need to explore women's experiences of IPV during pregnancy and after HIV disclosure and understand midwives' perception of IPV during this period and after testing and disclosing HIV status. The information may be used to feed into interventions for the prevention of IPV and HIV.

However, the role of the antenatal care in HIV testing and disclosure requires further scrutiny for the development of such interventions. For example, the current practice guidelines in Zimbabwe

indicate that pregnant women must test for HIV during antenatal care and health workers must encourage them to disclose their results to their partners. Zimbabwe's current Sexual Offenses Act (2001) stipulates that failure to disclose their positive HIV results to partners may lead to prosecution if the other partner is infected unknowingly¹. Perhaps more significantly than recent legal provisions, however, the patriarchal male dominated system in which male partners have control over the reproductive health and sexuality of women, poses threats to safe sexual practices after HIV testing. The possibility of IPV after testing and disclosing the results has not been systematically researched globally. It is therefore critical to measure the extent to which women disclose their results to partners and their experiences of IPV as a result of HIV testing and disclosure.



Although a study on IPV conducted in Zimbabwe a decade ago was a breakthrough, with respect to highlighting the relationship between IPV and HIV in Southern Africa (Njovana and Watts 1996, Watts, Keogh *et al.* 1998), there have been no further dedicated studies on the subject in the country. In the past decade, research and advocacy focus has shifted from violence against women by intimate partners, to general political violence against both men and women. However, there has been no research that explores whether these broader societal changes are accompanied by changes in the rates and dynamics of IPV. There is therefore limited information on the relationship between IPV and HIV among HIV positive pregnant women attending ANC in Zimbabwe. Population-based-data in Zimbabwe show no relationship between HIV and IPV (Harling, Msisha *et al.* 2010, Nyamayemombe, Mishra *et al.* 2010). Since this data

¹ However, Chirawu (2006)'s assessment of the prosecutions of gender-based-violence shows that by 2006, no prosecutions had been made. Courts are unable to have the partners undertake HIV tests to prove that the partner knowingly transmitted HIV.

includes all women of reproductive age, a possible link with a more defined pregnant population accessing care in public health settings, needs to be investigated. The 2010-2011 Zimbabwe Demographic and Health Survey (DHS) estimated the prevalence of IPV among women who reported that they were physically abused during one or more of their pregnancies in the last five years to be 5% (ZIMSTAT and ICF 2012). Since the study required women to report about their past pregnancies as far back as five years, it is possible that recall bias influenced reporting, leading to under-reporting of violence. The DHS's narrow definition of IPV excludes women who never married or cohabited, who were as many as a quarter (24.7%) of the total population of women interviewed leading to an underestimation of the prevalence in many countries and possibly leading to no association with HIV (Harling, Msisha *et al.* (2010). In addition the DHS only measured physical violence excluding sexual and emotional violence. The prevalence of IPV and its forms among pregnant women is therefore insufficiently documented in Zimbabwe. Measuring IPV prevalence during pregnancy and after disclosure allowed us to assess and compare relationships between IPV with socio-demographic, behavioural, pregnancy and sexual risk factors of IPV in pregnancy and after disclosure to gain a better understanding of IPV dynamics. This study sought to establish the association between IPV and HIV during pregnancy. It is the first study in Zimbabwe to explore the dynamics, extent and relationship with HIV, of IPV in pregnancy. An understanding on the extent of the burden facing pregnant women in a double occurrence of IPV and HIV, will feed into policy-making, programme development and implementation.

1.3 Relevance of the study

There is increasing research on the association between HIV serostatus and IPV in sub-Saharan Africa, but with mixed results. The association and its extent are yet to be established during pregnancy in Zimbabwe. As gender inequality and IPV are increasingly cited as socio-health determinants of the high risk of HIV that women face, an urgent research agenda has to be set to provide improved programming on socio-cultural and behavioural strategies to reorient and strengthen HIV prevention efforts. It is also significant to study the link between gender inequality, IPV and HIV, as an alternative to the bio-medical perspective that has tended to neglect the socio-structural aspects of society in addressing HIV prevention and care. The findings contribute to the understanding of the development of prevention interventions which are still emerging. Research on screening pregnant women for IPV is predominantly conducted in developed countries, and findings from this study contributed to an understanding of how to develop interventions with pregnant women in developing settings, to minimize the vulnerability of women during pregnancy and after disclosing their HIV status to their partners. The study findings assist policy makers and service providers to contribute to safe motherhood and child health. The significance of examining the link between gender-based-violence and HIV is apparent in the drive to achieve the Millennium Development Goals (MDGs) (which countries are lagging behind in meeting), particularly, MDGs 3 and 6 which call for the promotion of gender equality and women's empowerment and combating HIV respectively. Overall, the study contributes to knowledge about the association between IPV and HIV during pregnancy and ultimately the prevention of IPV and HIV.

1.4 Aim and objectives of the study

The main aim of the study is to investigate the relationships between intimate partner violence (IPV) and HIV during pregnancy. The specific objectives of the study are as follows:

- i) To systematically review literature to determine the rates of and factors associated with experiencing IPV during pregnancy in Africa;
- ii) To estimate the prevalence and frequency of IPV during pregnancy and after disclosing HIV status;
- iii) To assess if child abuse and forced first sexual intercourse are associated with experiencing IPV during pregnancy;
- iv) To compare IPV experiences before pregnancy and during pregnancy;
- v) To assess the relationship between IPV and the risk of HIV among pregnant women;
- vi) To examine the association between disclosure of HIV status and IPV among pregnant women;
- vii) To explore women's perspectives of sexuality and intimate-partner-violence during pregnancy in relation to HIV testing; and
- viii) To explore midwives' perceptions and experiences of responding to IPV in antenatal care.

1.5 Study hypotheses

Major Null Hypothesis: IPV during pregnancy is **not** associated with HIV status, disclosure of HIV status, child abuse and forced first sexual intercourse

Major alternate hypothesis: IPV during pregnancy is significantly associated with HIV status, disclosure of HIV status, child abuse and forced first sexual intercourse

Sub-Null hypothesis: Pregnant women who test HIV positive and disclose their serostatus to their sexual partners are **not** likely to experience more abuse from their partners than HIV negative pregnant women

Sub-alternate hypothesis: Pregnant women who test HIV positive and disclose their serostatus to their sexual partners are likely to experience more abuse from their partners than HIV negative pregnant women



Chapter Two

LITERATURE REVIEW

2.1 Introduction

This section reviews relevant literature on the epidemiology of IPV and HIV globally and on the relationship between IPV and HIV during pregnancy and situates this study in relation to the findings and gaps in the literature. It discusses risk factors for IPV including gender inequities and sexual risk factors, and it reviews the available evidence on these issues for Zimbabwe, including attention to the political and economic conditions and changes in Zimbabwe over the past two decades. It finally presents theoretical and conceptual frameworks that explain the study constructs and the inter-linkages of various factors leading to IPV. As part of and in addition to the literature review, I conducted a formal systematic review and meta-analysis, to understand prevalence and risk factors for IPV during pregnancy in Africa. This helped me to situate the study in the context of relevant studies conducted in Africa. The systematic review is presented as a published Paper I in the findings section.

2.2 Defining intimate partner violence (IPV)

IPV is a form of gender-based-violence² and is defined by the WHO as the intentional use of physical force or power, threatened or actual, against a partner that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation (Krug, Mercy, *et al.* 2002). This study uses the WHO conceptualisation of IPV which includes

² Gender based violence, of which IPV is a form, is defined by the United Nations as “any act of violence that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivations of liberty, (whether) occurring in public or private life” (CSO and Macro 2007: 259).

women's reported physical, sexual and emotional violence perpetrated by one's former or current intimate partner, regardless of the legal status of the relationship. It includes acts or threats that may lead to physical, sexual, psychological or emotional harm to the partner. Although IPV may be perpetrated by a woman against a husband/male partner, it is violence perpetrated by a male partner against a female partner in heterosexual relations which is more dominant (Jewkes, Levin *et al.* 2002, WHO 2005) and has been nurtured in patriarchal societies. Any reference to IPV in this study therefore refers to male perpetration of violence against their female partners. The terms "abuse" and "assault" are used interchangeably and consistently with "violence" in this thesis. IPV may be measured by reference to time for example, current IPV and lifetime IPV. Current IPV prevalence is the proportion of ever partnered women reporting having experienced at least one form of violence in the past 12 months, while lifetime prevalence is the proportion of ever partnered women reporting at least one form of violence by a partner or former partner in their life time (Garcia-Moreno, Jansen *et al.* 2006). IPV during pregnancy refers to IPV that takes place from the time a woman becomes pregnant until the ninth month of pregnancy before delivery. While gender-based-violence is broader and usually refers to any violence perpetrated by a person to another of the opposite sex including IPV, IPV is the most common form of gender-based-violence and refers to intimate partners as either the perpetrator or the victim³.

This study uses the WHO (2005) definition of IPV and its three major types (physical, sexual and emotional) described below. Physical IPV occurs when a partner slaps a woman, throws something at her, pushes, hits, kicks, chokes, burns, or threatens her using or actually uses a

³ Violence directly aimed at sexual or gender identity – for example homophobic violence – may also be considered gender-based-violence.

weapon or object that may harm her. Sexual IPV is when a woman is physically forced to have sex when she does not want to, has sex she does not want to because she is afraid of what her partner might do or she is forced to do something sexual that she finds degrading or humiliating. Emotional IPV occurs when a woman is insulted, humiliated/belittled in public, intimidated/scared on purpose by, or receives threats to hurt her or her relative/friend from a partner (WHO 2005). These definitions cover many actions performed by a man to his partner making it difficult to under report violence. It has been found that definitions of IPV impact on the measurement of violence leading to underreporting or over reporting of violence although the latter is uncommon (Taillieu and Brownridge 2010). The definition and measurement of IPV varies in studies, which makes it difficult to compare as some studies may only ask few questions which may lead to underestimating IPV, while others do not measure other forms of IPV such as emotional and sexual violence (Stewart and Cecutti 1993). This was the reason for the WHO multi-country study across 10 countries using the same research methodology to allow for comparison across countries. Lifetime intimate partner physical violence was reported to be as low as 13% in a Japanese city to as high as 61% in Peru among ever partnered women and sexual IPV ranging from 6% in Japan to 59% in Ethiopia (WHO 2005).

Table 1 shows the prevalence of different types of gender-based-violence and IPV from a multi-clustered national representative population sample (DHS) in Zimbabwe (ZIMSTAT and ICF 2012). IPV among ever married women in Zimbabwe falls within the WHO ranges above with 20.7% women reporting lifetime physical IPV and 13.3% sexual IPV. However, the figures exclude women in the never-married category and therefore may have underestimated the actual prevalence of IPV in Zimbabwe and Harare. Nine in 10 perpetrators of violence reported by

women in Zimbabwe were past or current intimate partners. Physical and sexual IPV among ever married women was higher in Harare than the national average.

Table 1: Violence against women and IPV in a nationally represented population study in Zimbabwe (DHS).

| Type of violence | National % | Harare % |
|---|---------------|---------------|
| General violence against women | N=6542 | N=1160 |
| Ever experienced physical violence | 29.9 | 29.9 |
| Forced sexual initiation | 21.6 | --- |
| Intimate partners as perpetrators of all physical violence against women (n=1956) | #80.2 | --- |
| Ever experienced sexual violence | 27.2 | 29.9 |
| Percentage of all sexual violence perpetrated by intimate partners## | 91.8 | --- |
| Ever physical violence during pregnancy among ever married women (n=5054) | 5.0 | **6.1 |
| *Violence by intimate partners among ever married women | N=5016 | N=836 |
| Any emotional violence in the past 12 months | 22.7 | 22.5 |
| Any sexual violence in the past 12 months | 13.3 | 27.2 |
| Any physical violence in the past 12 months | 20.7 | 25.6 |
| Ever physical and/or sexual violence | 42.3 | 40.3 |
| Ever physical, sexual and/or emotional violence | 49.6 | 47.3 |

Source: (ZIMSTAT and ICF 2012).

* The DHS violence module did not assess IPV among never married women

#This is for all women. If we include ever married women (n=1678) only, it is 91.8%

All women were included. If we include ever married women (n=1596) only it is 95.4%

** n=832

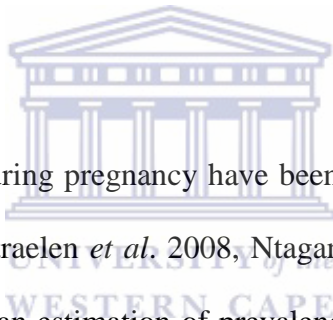
2.3 Global variations in IPV research during pregnancy

Research on violence during pregnancy has increased over the past decade. Existing literature shows that research on violence against pregnant women has been conducted in different contexts using different study methods (sampling frames, measurement instruments and analysis methods) making it difficult to make comparisons. Qualitative studies are also increasing our understanding of dynamics of violence in pregnancy. Most of the studies on IPV during pregnancy have not used the HIV status of pregnant women in their analysis to understand the dynamics of IPV in both HIV infected and not infected pregnant women. In some studies, investigators assess only physical violence in pregnancy (Stewart and Cecutti 1993). Some assess physical and sexual violence only (Stewart and Cecutti 1993, Muthal-Rathore, Tripathi *et al.* 2002, Roelens, Verstraelen *et al.* 2008), while others looked at all three types of violence (Maman, Mbwambo *et al.* 2001a). The current study integrates all three types of violence.

Data on violence in pregnancy has been obtained from women during different times of their pregnancy or lives such as at 20 weeks gestation age (Stewart and Cecutti 1993), 48-72 hours after delivery (Muthal-Rathore, Tripathi *et al.* 2002) and as long as five years after delivery (CSO and Macro 2007, Fanslow, Silva *et al.* 2008) subjecting some responses to recall bias with the passage of time.

Some researchers combine violence experienced just before the pregnancy with violence during pregnancy through asking pregnant women about violence in the past 12 months (Ezechi, Kalu,

et al. 2009, Dunkle, Jewkes, *et al* 2004a) and this this is usually considered as pregnancy-related-violence. This is because violence during pregnancy and negative pregnancy outcomes are usually associated with violence that took place just before pregnancy or at the pregnancy onset, for example, in situations of mistimed or unwanted pregnancy and/or forced pregnancy (Stewart and Cecutti 1993, Fanslow, Silva *et al.* 2008, Roelens, Verstraelen *et al.* 2008). This measure has also often been regarded as a predictor of IPV during pregnancy. Other studies have also focussed on trends in the relationship between violence and both current and previous pregnancies (Fanslow, Silva *et al.* 2008, Vatnar and Bjørkly 2010). This has enabled comparisons of violence in pregnancy across parity to understand pregnancy-related-risk factors for IPV.



Most of the studies on violence during pregnancy have been cross sectional in design (Dunkle, Jewkes *et al.* 2004, Roelens, Verstraelen *et al.* 2008, Ntaganira, Muula *et al.* 2009) with a few cohort studies that not only allow an estimation of prevalence of IPV, but also a description of the progression of violence in pregnancy and some causal explanations since the participants would have been followed for a considerable period of time (Temmerman, Ndinya-Achola *et al.* 1995). Other longitudinal behavioural studies on violence have shown some changes in experiences of violence if men and women are taught gender equity (Pronyk, Hargreaves *et al.* 2006, Jewkes, Nduna *et al.* 2008). Different results were also obtained in population-based studies with big sample sizes (CSO and Macro 2007, Fanslow, Silva *et al.* 2008) and health facility-based studies with limited sample sizes (Muthal-Rathore, Tripathi *et al.* 2002). In the developed countries, most data are collected using random telephone interviews or by recruiting participants at health facilities who are given questionnaires to complete at home before

posting/handing them to the investigator usually yielding a low response rate such as 39.4% (Roelens, Verstraelen *et al.* 2008), while in many developing countries interviews in most studies are conducted face-to-face and yield a higher response rate of over 80% (Dunkle, Jewkes *et al.* 2004).

Two previous reviews of literature on prevalence of IPV during pregnancy are particularly relevant to this study. The first review of prevalence of violence during pregnancy showed rates of IPV between 0.9% and 20% but this only reviewed studies conducted in the Western countries (Gazmararian, Lazorick *et al.* 1996). A second review, incorporated studies from developing countries (Taillieu and Brownridge 2010). In this global review, 18 studies on IPV during pregnancy recorded prevalence ranging from 0.9 to 30% (Taillieu and Brownridge 2010) with the only study from Africa recording only 2.3% IPV. However, it is crucial to state that although this second review included studies from developing countries including Africa, the coverage of the continent was inadequate due to their limited search methods. There is therefore need to systematically review IPV studies conducted in Africa given that many studies have been conducted in the past decade. A higher prevalence of IPV is likely in Africa given the high levels of gender inequalities and poverty which have also been reported as the drivers of IPV (Jewkes, Dunkle *et al.* 2006).

Evidence from IPV prevalence studies that looked at IPV both before and during pregnancy suggests that pregnancy may sometimes be a protective period, but may also be associated with persistent or increasing abuse. Stewart and Cecutti conducted a cross sectional survey of 548 pregnant women in Canada which recorded a prevalence rate of 10% physical violence in the 12

months prior to current pregnancy and a subsequent 6.6% during current pregnancy (Stewart and Cecutti 1993). A provincial cross sectional study in East Flanders in Belgium observed a 4% prevalence of physical and/or sexual violence during the 12 months before the pregnancy and 3% prevalence during current pregnancy (Roelens, Verstraelen *et al.* 2008). In New Zealand from a sample of 125 (the larger study recruited 2391) who reported violence both before and during pregnancy it was observed that 19.7% reported worsening violence during pregnancy, while 26% reported decreasing violence and in 54.1% cases there was no change. In New Delhi, Muthal-Rathore, Tripathi *et al.* (2002) found a 21% prevalence of violence against pregnant women (N= 800 women). Of the abused 168 women, 23.8% reported abuse for the first time during pregnancy, 7.7% reported increasing violence while 21.4% reported a decrease in violence and 47% reported no change in frequency of violence (Muthal-Rathore, Tripathi *et al.* 2002). Similar results were found in USA (Koenig, Whitaker *et al.* 2002). These studies show that violence can start or increase during pregnancy, continue in pregnancy, or stop or decrease in pregnancy in terms of frequency and severity. It is therefore important to assess factors associated with these dynamics. However, studies suffer from small sample sizes and as most of them were conducted in Europe and America it is difficult to extrapolate their findings and trends to Zimbabwe, because of different cultural backgrounds, social and economic dynamics and gender relations.

An exploration of women's experiences of violence and male partner control during pregnancy may help to understand relational issues and how this influences IPV during pregnancy (Bacchus, Mezey *et al.* 2006). This may help to build an understanding of some of the prevalence differences between and across provinces and regions as well as differences before and during pregnancy. . Foregrounding and complementing quantitative research with qualitative

research helps to answer some of the questions raised from observing quantitative data, as shall be discussed in the next chapter.

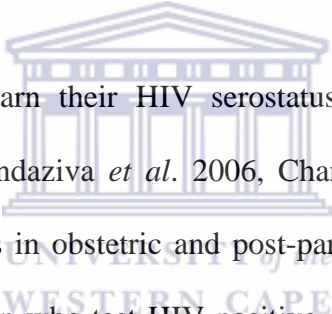
2.4 Why focus on pregnant women?

Women in the reproductive age group experience the most gender-based-violence as they are more likely to be in sexual partnerships. The HIV pandemic is also more prevalent in this group (17.7%) than the general population (14.3%) in Zimbabwe (Chandisarewa, Stranix-Chibanda *et al.* 2007, CSO and Macro 2007). With research in sub-Saharan Africa continuing to explore the association between IPV and HIV and looking at ways to prevent the two pandemics, it is, therefore, critical to focus on pregnant women and assess their levels of risk of IPV and the association with HIV in pregnancy. The enormous negative health outcomes associated with violence against pregnant women including reproductive health-related problems, mental problems, physical injuries and effect on baby (Heise, Raikes *et al.* 1994, Campbell, Jones *et al.* 2002, Campbell 2002, Heise, Ellsberg *et al.* 2002, WHO 2005, Campbell, Garcia-Moreno *et al.* 2004, Campbell, Lichty *et al.* 2006, Teerapong, Lumbiganon *et al.* 2009), point to the need to research violence against pregnant women, so as to help contribute to safe motherhood and healthy babies. The effects of IPV on unborn children, which include preterm babies, still birth, high risk of exposure to HIV, and low birth weight make an even stronger case for researching IPV during pregnancy, as these effects separate IPV during pregnancy from IPV in general.

The changes in physical, social and sexual issues associated with being pregnant, also influence changes in relationships during pregnancy, resulting in conflict and possible violence. Edin (2006) concluded from a rigorous qualitative research that involved interviewing men, women

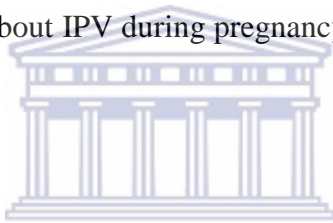
and midwives that the pregnancy situation, brought with it some vulnerability to women. The pregnancy situation is therefore important to study in order to understand these changes in detail. Such study should include measuring IPV during pregnancy and comparing it to the pre-pregnancy situation, and assessing the dynamics of change.

With increasing roll-out of prevention of mother-to-child transmission (PMTCT) programmes in routine antenatal care, new opportunities now exist to analyse the associations of IPV during pregnancy with HIV. For example, this study was able to utilise the readily available HIV test results in the ANC facilities.



A large proportion of women learn their HIV serostatus during pregnancy (Perez, Orne-Gliemann *et al.* 2004, Perez, Zvandaziva *et al.* 2006, Chandisarewa, Stranix-Chibanda *et al.* 2007). However, the modifications in obstetric and post-partum care for HIV positive women pose a serious challenge for women who test HIV positive and who have to share their results with partners as they need to take antiretroviral (ARV) therapy for the prevention of mother-to-child HIV transmission (PMTCT) and make decisions on infant feeding (Koenig, Whitaker *et al.* 2002, Perez, Orne-Gliemann *et al.* 2004, Perez, Zvandaziva *et al.* 2006, Chandisarewa, Stranix-Chibanda *et al.* 2007). It is therefore important to determine the prevalence, forms and magnitude of IPV during this time, when many women reportedly share their results with their partners. This offers a rare opportunity to assess the relationship between IPV and HIV status in general, and IPV and disclosure of HIV status among pregnant women in particular.

As will be discussed in more detail below Zimbabwe records high coverage of ANC (90%) reported in the recent Demographic and Health Survey (DHS) (ZIMSTAT and ICF 2012). Munjanja and colleagues reported a similarly high coverage of postpartum care (80.4%) in Zimbabwe (Munjanja, Nystrom *et al.* 2009). There is also a high uptake of HIV testing among pregnant women, with a 99.9% uptake in the provider initiated (opt-out) approach and 65% in the traditional client initiated (opt-in) approach (Chandisarewa, Stranix-Chibanda *et al.* 2007). Current practice follows the provider-initiated-approach. Disclosure of results show similar high prevalence with 88% reported to have disclosed their HIV test results to their partners (Chandisarewa, Stranix-Chibanda *et al.* 2007). This epidemiological information shows the feasibility of conducting research about IPV during pregnancy with postnatal women at postnatal care facilities.



2.5 Association between IPV and HIV

Studies in sub-Saharan Africa have found the risk of IPV higher in women with HIV. HIV positive women had higher odds of reporting physical IPV than HIV negative women recruited from pre or postnatal clinics in Rwanda (Van der Straten, King *et al.* 1998) and South Africa (Dunkle, Jewkes *et al.* 2004). IPV in these studies was lifetime IPV and therefore did not specifically refer to the pregnancy situation. In addition, the study by van der Straten King *et al.* (1998) assessed HIV 18 months after pregnancy in a two year follow up. These limitations suggest the need to specifically measure IPV during pregnancy and utilize HIV results obtained during pregnancy in order to assess the relationship between IPV and HIV more clearly. Similar findings on the association between IPV and HIV have been found elsewhere in the general population (Cohen, Deamant *et al.* 2000, Maman, Campbell *et al.* 2000, Maman, Mbwambo *et*

al. 2002, Sareen, Pagura *et al.* 2009). Very few studies have researched partner violence against HIV-positive pregnant women and HIV-negative pregnant women. A study conducted by Ntaganira and colleagues in Kigali city and two other rural antenatal clinics in Rwanda, reported that HIV positive pregnant women experienced significantly higher rates of all forms of IPV than HIV negative pregnant women (Ntaganira, Muula *et al.* 2008).

While there seem to be an agreement that there is an association between IPV and HIV, some studies have found the contrary. Koenig and colleagues published a striking report of no association between IPV and HIV in pregnant women (336 HIV infected and 298 HIV negative) in the USA in a health facility based survey (Koenig, Whitaker *et al.* 2002). However, since the study by Koenig and colleagues was conducted in a developed country (USA), the results cannot be generalized to situations with generalized epidemics. Recent analyses of DHS data from across the world show no significant association between lifetime IPV and HIV status diagnosed during the study (Harling, Msisha *et al.* 2010, Nyamayemombe, Mishra *et al.* 2010). No associations were found in Zimbabwe (Nyamayemombe, Mishra *et al.* 2010), Uganda (Kayibanda, Bitera *et al.* 2012) and in 10 DHS countries combined and as individual countries (Harling, Msisha *et al.* 2010). However, the DHS data used were cross sectional which limits our ability to determine the temporality of the association between HIV and IPV as also noted by Harling, Msisha *et al.* (2010). This points to the need for a better understanding of the complexities in the relationship between HIV and IPV in different settings. However, HIV was associated with gender inequity, gender power and partner controlling behaviours in South Africa (Dunkle, Jewkes *et al.* 2004, Harrison, O'Sullivan *et al.* 2006, Jewkes, Sikweyiya *et al.* 2011). Such contrasting evidence calls for further research on the subject in different settings,

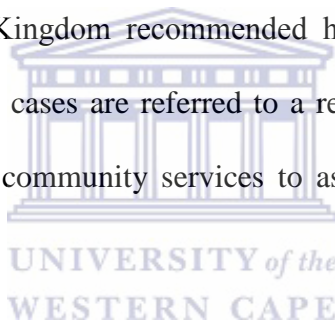
with different gender and HIV transmission dynamics, to assess in greater detail the association between HIV and IPV and factors such as gender inequity that may underlie both IPV and HIV.

2.6 The health sector and IPV

Due to the magnitude of the IPV problem and its effects on the mother and the unborn child, gynaecological and paediatric professional organisations have recommended interventions with pregnant women in antenatal care settings (Roelens, Verstraelen *et al.* 2006). However, literature reviews on screening pregnant women for IPV report that gynaecologists and other health care staff are not fully equipped with the knowledge and capacity and do not have the willingness to implement IPV interventions such as routine screening for IPV (Erickson, Hill *et al.* 2001, Wathen and MacMillan 2003, Roelens, Verstraelen *et al.* 2006). Health staff often do not perceive IPV to be prevalent enough to warrant their attention. Results from studies conducted in Belgium, Canada and Tanzania show that pregnant women do not disclose IPV to health care staff unless they are prompted to (Stewart and Cecutti 1993, Antelman, Smith Fawzi *et al.* 2001, Roelens, Verstraelen *et al.* 2006). Further challenges such as nurses' negative attitude and scolding of patients in reproductive and sexual health sessions have been documented in South Africa (Jewkes, Abrahams *et al.* 1998, Wood and Jewkes 2006) and these may have negative effects in responding to partner violence in African health settings.

Qualitative studies with midwives who screened clients for domestic violence found the following obstacles to responding to partner violence: time constraints, lack of training, lack of privacy, unsupportive management, lack of support resources, fear of offending the patient, frustration with patient not changing and lack of feedback after referral (Bacchus, Mezey *et al.*

2002, Mezey, Bacchus *et al.* 2003, McCosker-Howard, Kain *et al.* 2005, Feder, Hutson *et al.* 2006). In addition, a review of qualitative studies showed that women express dissatisfaction with services given by nurses especially when the nurses are insensitive and do not seem to understand the complexity of partner violence issues (Feder, Hutson *et al.* 2006). Chiang and colleagues note that women emphasised the value of just being asked about IPV, regardless of whether they disclosed, as this raises women's awareness of partner violence and helps to empower them against further abuse (Chang, Decker *et al.* 2005). This approach may be relevant in less developed countries where the resources for counselling and intervention are limited, although it may sound unethical to ask women without suggesting further assistance. Mezey and colleagues' study in the United Kingdom recommended how midwives' workload could be reduced, suggesting that identified cases are referred to a resident specialist domestic violence midwife who works closely with community services to assist with further referrals (Mezey, Bacchus *et al.* 2003).



Most literature on screening women for partner violence comes from the developed countries, which predominantly presents data from obstetrician-gynaecologists within private settings. However, the situation is different in Zimbabwe and other developing countries, where most pregnant women are attended to by nurses in public health settings (CSO and Macro 2007). It is critical to explore perceptions and experiences of responding to partner violence among pregnant women by nurse midwives working in Zimbabwe's public maternity services as well as exploring perceptions and experiences from women attending these services.

2.7 Relationship between HIV disclosure and IPV

The HIV testing process encourages disclosing HIV test results to a partner, in order to prevent the transmission of HIV in sexual partnerships. However, limited research has been conducted on the relationship between the disclosure of HIV test results and IPV. There is also controversy as some studies point to a relationship, while others do not find any relationship between the two. A review of studies on rates and outcomes of a disclosure process concluded that studies did not systematically measure IPV, but spontaneously reported negative effects after a disclosure process, which included stigma, being chased away from home, and some violence reactions. (Maman, Mbwambo *et al.* 2003). Qualitative studies also reported mixed results from respondents such as women receiving support, while others experienced negative effects (North and Rothenberg 1993, Gielen, O'Campo *et al.* 1997, Klitzman, Kirshenbaum *et al.* 2004).

Research in Massachusetts, USA suggests a relationship between STI/HIV test and dating violence as girls who experienced violence at the hands of their partners were three times more likely to have been tested for HIV and STDs and more than two and a half times more likely to have had an STD diagnosis (Decker, Silverman *et al.* 2005). This study cannot be used to make generalisations on the link between HIV status disclosure and IPV in the Zimbabwean context, because secondary school girls who made up the sample do not represent all women of the reproductive age (15-49) and also because dating violence is different from marital and long term relationships that characterise a number of women in the reproductive age groups. Associations between IPV and HIV status disclosure were reported in the USA (Gielen, Fogarty *et al.* 2000) and Nigeria (Ezechi, Gab-Okafor *et al.* 2009). However, some studies reported that receiving HIV test results pre-natally was not associated with an increase in violence, suggesting that

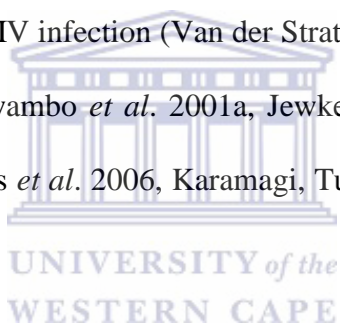
violence could be linked to socio-economic factors that characterise women's health and relations and not HIV serostatus per se (Koenig, Whitaker *et al.* 2002). In Tanzania, partners who tested HIV positive reported receiving support from their partners (Kistner 2003) and in South Africa those who were abused and did not share results for fear of victimisation by their partners, continued being abused, while the remainder that shared their HIV positive results with their partners, reported continued trusting and loving relationships (Vetten and Bhana 2001).

While these studies suffer from serious methodological problems such as small sample sizes which seriously limit the ability to detect differences or to draw firm conclusions they point to the need for further research with larger and representative samples. HIV status disclosure is an important component of HIV prevention strategies and must continue to be promoted but its impacts on relationships needs to be better understood. Early studies of HIV status disclosure in Africa raised the role of disclosure and its negative consequences in a relationship (Temmerman, Ndinya-Achola *et al.* 1995) at a time when HIV treatment was not available. Women were abused after they received their test results and disclosed to partners, to such an extent that the researchers felt obliged to stop encouraging women to collect their results. However, since disclosure remains an important aspect of prevention of HIV, strategies to reduce women's vulnerability of violence as an outcome of disclosure in relationships must be a critical aspect of such HIV interventions.

2.8 Risk factors for IPV and HIV

Research suggests that IPV and HIV share many risk factors which include women's physiological and biological make up; engaging in unprotected sex; sex with multiple partners;

higher rates of sexually transmitted infections (STIs); disclosure of an STI; engaging in transactional sex; having a risky sexual partner (Jewkes, Dunkle *et al.* 2006, Pronyk, Hargreaves *et al.* 2006, Jewkes, Sikweyiya *et al.* 2009). Male partner risk factors shared by HIV and IPV include alcohol and drug abuse, injecting drugs, having a history of STI and having multiple sexual partners (Dunkle, Jewkes *et al.* 2004, Jewkes, Sikweyiya *et al.* 2009, Geis, Maboko *et al.* 2011). For instance, studies conducted in the USA, South Africa, Tanzania and Uganda found out that male perpetrators of rape and/or sexual violence, are more likely to be infected by HIV and or other STDs, report inconsistent or no condom use, coerce sexual intercourse without condoms, have multiple sexual partners and that they have more frequent intercourse and these factors greatly expose women to HIV infection (Van der Straten, King *et al.* 1995, Jewkes, Penn-Kekana *et al.* 2001, Maman, Mbwapo *et al.* 2001a, Jewkes and Abrahams 2002, Abrahams, Jewkes *et al.* 2006, Dunkle, Jewkes *et al.* 2006, Karamagi, Tumwine *et al.* 2006, Raj, Santana *et al.* 2006).



The UNAIDS and WHO recognise that gender inequality is an important risk factor for both IPV and HIV (Maman and Medley 2004, WHO 2004). Studies in sub-Saharan Africa have also shown positive associations between gender inequality and HIV infection (Van der Straten, King *et al.* 1998, Dunkle, Jewkes *et al.* 2004). Dunkle and colleagues reported an association between IPV and a high level of male control in a woman's current relationship after adjusting for age, women's risk behaviour and current relationship status in South Africa (Dunkle, Jewkes *et al.* 2004). Exchanging sex for goods or services was also associated with IPV and a measure of the Sexual Relationship Power Scale (SRPS) (Dunkle, Jewkes *et al.* 2004). Due to the imbalance in power and gender inequality, men often determine the type and frequency of sexual behaviours

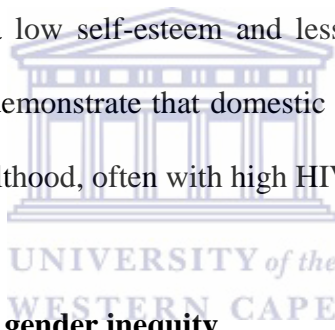
and women's ability to suggest condom use to their partners is undermined. Men have a tendency to refuse condom use if suggested by their partners and downplay communication about sex and HIV with their partners (Langen 2007).

Socio-economic and demographic characteristics of women such as age, marital status, social class and type of economic activity have been reported in studies in sub-Saharan Africa to be significantly associated with IPV and HIV (Hindin 2003, Jewkes, Levin *et al.* 2003, Karamagi, Tumwine *et al.* 2006, Hindin, Kishor *et al.* 2008). For example, age (below 30 years) and large age differences between partners were associated with a high risk of abuse and HIV infection in Tanzania (Maman, Mbwambo *et al.* 2002). Jewkes and colleagues argued that age differences between partners is a marker of HIV risk in that the bigger the age difference between partners, the more we note its effects on gender hierarchy, and as a result the more control exercised by elders on the younger people (older men on younger women) (Jewkes, Levin *et al.* 2003). This means that female partners, who are usually much younger, are most likely to be victims of physical and sexual abuse. Most of these studies on IPV and HIV did not specifically address IPV during pregnancy.

2.9 Relationship between child abuse, forced first sexual experience and adult violence

Research points out that there is a causal pathway between past violence, recent or current adult violence and HIV risk. Having been abused as a child increases one's vulnerability as a teen or adult woman to engage in unsafe sexual practices. Studies in the USA reported that women who were physically abused during childhood were less likely to consistently use condoms in adulthood (Teitelman, Ratcliffe *et al.* 2008), while in Ethiopia and Pakistan, sexually abused

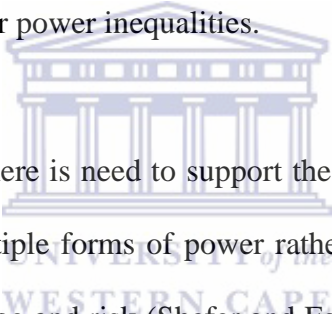
girls were reported to have low self-efficacy to negotiate condom use. They had a low self-esteem, were suicidal, felt helpless and rejected (WHO 2004). Dunkle and colleagues, in a study among pregnant women in South Africa, reported that forced first sexual intercourse was associated with an increase in the risk of current physical and/or sexual violence and that child sexual abuse was associated with an increased risk of current physical and/or sexual violence (Dunkle, Jewkes *et al.* 2004a). In Uganda, it was found that women who were coerced into sex at their onset of sexual activity, were less likely to use condoms consistently in the six months preceding the interviews, reported more genital tract symptoms and reported unintended pregnancy, than those whose first sexual act was consensual (Koenig, Zablotska *et al.* 2004). This could also be mediated by a low self-esteem and less negotiating power on the part of abused women. All these studies demonstrate that domestic violence is cyclic and that abuse in childhood is linked to abuse in adulthood, often with high HIV infection risk.



2.10 Gender-based-violence and gender inequity

Research on the vulnerability of women to IPV and HIV has received more prominence in sub-Saharan Africa as a response to the devastating effects of the IPV and HIV epidemics (Karim 2005, Hunter 2007, Shefer, Strebel *et al.* 2011). Heterosexual relationships have been problematised in the context of normative gender roles and gender power relations in Southern Africa (Hunter 2005, Harrison, O'Sullivan *et al.* 2006, Bhana and Pattman 2009, Clowes, Shefer *et al.* 2009), while gender inequity has become more broadly recognised as a major determinant of gender-based-violence. For example, in South Africa, the rising levels of intergenerational sex (from 18.5% to 27.6% between 2005 and 2008) whereby younger women increasingly partner with men more than 5 years their age (Shisana 2009) is a worrying phenomenon which

increases risk of IPV and HIV among the poor young women by the better resourced, riskier and violent men whom they have transactional sex with (Dunkle, Jewkes *et al.* 2007). Transactional sex has also been researched in Southern Africa, with results showing strong relationships with IPV and HIV risk (Silberschmidt and Rasch 2001, Dunkle, Jewkes, *et al.* 2004, Dunkle, Jewkes *et al.* 2007, Clowes, Shefer *et al.* 2009, Masvawure 2010, Masvawure 2011). Transactional sex intersects with many social differences in society and creates further vulnerability to women. These studies support a large body of research which emphasizes the existence of a link between high risk sexual practices, normative gender roles and gender power relations. The feminization of poverty in Africa has been linked to the risk of HIV infection among women through the intersection of economic and gender power inequalities.



Shefer and colleagues argue that there is need to support the feminist longstanding challenge of gender inequitable norms and multiple forms of power rather than open, directive and didactic messages addressing HIV knowledge and risk (Shefer and Foster 2009). Such an approach helps to target both HIV and IPV prevention as it acknowledges the interconnectedness between HIV and IPV.

2.11 Socio-economic, political and health situation in Zimbabwe

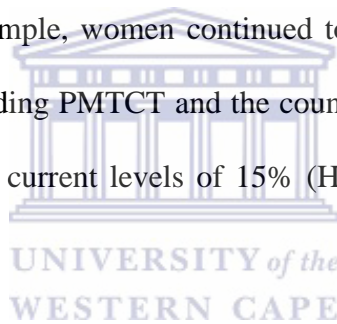
The government of Zimbabwe's socio-economic, political and health policies, or lack thereof, in the past decade (2000-2010) have led to a combination of ill-health and life threatening events such as extreme poverty, deprivation, poor health and widening gender inequalities in the country. Some of the links between structural economic factors, gender relations, and HIV are

longstanding as discussed further below, and are likely to have been exacerbated by the more acute insecurity of the first decade of this century. The land reform programme which started around the year 2000, was characterized by violence and killings of many people on commercial farms (Moyo 2002, Sachikonye 2011). The land reform programme, together with recurring droughts, led to a sudden decrease in agricultural output. During the same period, Zimbabwe registered the highest inflation in the world at the time which peaked at 98% per day (79.6 billion percent per month) in November 2008 (Hanke and Kwok 2009). The political situation characterized by pre- and post-election violence (Chitiyo 2000, Moyo 2002) instilled fear and a culture of violence including rape whose casualties were mostly women. Another significant abuse of human rights characterizing this period was the destruction of urban slums in a government programme named Operation Murambatsvina which also left about 700 000 urban people homeless and without a livelihood (Tibaijuka 2005, Bratton and Masunungure 2007). This operation destroyed informal housing and market places. As a result, women's informal trading spaces were destroyed, making them increasingly reliant on their male partners for most of their economic and household needs.

As a result of these socio-economic and political processes, the unemployment rate rose to over 80% (Hartmann and Werner 2011, Pollack 2011) with women being heavily affected. For example, women are charged user fees (US\$50) for antenatal and labour care. Brain drain saw many professionals including health workers migrating to other countries, leaving the country's health system grossly understaffed (Chetsanga and Muchenje 2003, Chikanda 2006). The country also faces consistent electricity load shedding and water cuts, which have been linked to outbreaks of diarrheal disease. In 2009 the outbreak of cholera throughout the country killed over

4000 people and over 98 000 cholera cases were recorded, exposing the weak health system especially in urban areas (Todd, Ray *et al.* 2010). Some of the health effects that these events contributed to directly or indirectly and that faced the population in the research setting, include one of the highest rates of HIV prevalence among women of reproductive health (see below), maternal mortality of over 960/1000 live births (ZIMSTAT and ICF 2012).

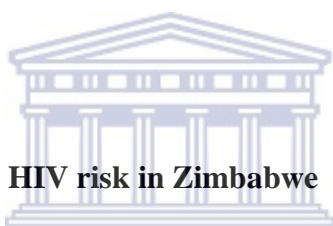
However, the introduction of the multi-currency regime, to replace the unstable local currency and the introduction of an inclusive government helped to stabilize the situation from 2009. Although poverty continued to run throughout the period of the study, certain aspects of health care continued to operate, for example, women continued to receive antenatal care services in these difficult circumstances including PMTCT and the country recorded a huge decline in HIV prevalence from 33% in 1990s to current levels of 15% (Halperin, Mugurungi *et al.* 2011) as shown below.



2.12 HIV prevalence in Zimbabwe

Zimbabwe is a high prevalence country with a generalized epidemic. The 2010-2011 DHS tested a nationally representative sample (N=15563) of almost equal numbers of men and women and reported a 15.2% prevalence of HIV in the 15-49 years age group (ZIMSTAT and ICF 2012). This figure compares well with the UNAIDS report of 14.3% prevalence (UNAIDS 2010). The current prevalence marks a significant decline from 18.1% in the previous DHS (2005-6) report. Women were more likely to be HIV infected with 17.7% testing HIV positive, while 12.3% men of the same age group testing positive. The epidemic is significantly higher in urban, than rural areas (16.7% vs. 14.6%), among the employed than those unemployed in the last 12 months

(17.9% vs.13.1%), among both men and women combined. The prevalence was also higher among women with some education and those in the higher wealth quintiles, than lower economic quintiles, and those with no education or tertiary education. The differences between men and women show the gendered nature of the HIV infection, which may also have implications for experiences of intimate-partner-violence. The DHS also showed higher levels of men earning cash and owning assets than women and women endorsing wife abuse, sexual abuse and partner control, reflecting the higher control that was previously reported in Zimbabwe (Hindin 2003). These wide differences create vulnerability among women, as women are both economically and socially dependent on their partners.

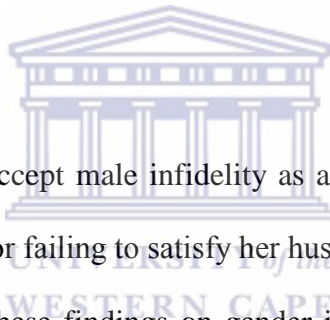


2.13 Gender inequality, IPV and HIV risk in Zimbabwe

Gender power imbalances increase women's vulnerability to HIV infection. Normative heterosexual masculinity is usually characterised by sexual conquest, multiple sexual partnering, and other risk taking behaviours which makes men and their partners vulnerable to HIV (Ratele 2008, Shefer, Crawford *et al.* 2008, Jewkes 2010, Jewkes, Sikweyiya *et al.* 2011). On the other hand, the feminisation of poverty, women's economic dependency, their subscription to acceptable behaviour norms of "housewife" and "mother", put them in vulnerable circumstances in relation to IPV and HIV infection. In Zimbabwe, the low status of some Shona women is compounded by fear to remain unmarried as single women usually lack social worth and economic protection. It therefore becomes difficult for women to reject unsafe sex or to disapprove of the various forms of violence by their partners (Jewkes 2002). If for example they leave their husbands, it would entail the return of marriage payments to the husband's clan,

which the in-laws would not be prepared to do (Schmidt 2004). Women often have little or no choice except to live with abusing partners.

The Shona culture, colonial patriarchy and the economic hardships in Zimbabwe especially in the past decade perpetuate unequal gender relations in Zimbabwe (Benson and Chadya 2003, Osirim 2004) that facilitate HIV risk and violence. Kambarami (2006:3) summarises Shona women's social reproduction of gender inequality based on patriarchy as follows: "Once a girl reaches puberty all teachings are directed towards pleasing one's future husband as well as being a gentle and obedient wife. Her sexuality is further defined for her, as she is taught how to use it for the benefit of the male...".



Women have also been made to accept male infidelity as an inevitable social phenomenon. In fact "it is the wife who is blamed for failing to satisfy her husband or for failing to curb his desire to do so" (Kambarami 2006:4). These findings on gender inequity are corroborated by earlier findings from a qualitative study conducted in Zimbabwe which reported that the predominant/normative model of Zimbabwean masculinity expects men to want and have sex regularly, while women are punished if they appear to enjoy sex too much or if they are thought to be unfaithful (Njovana and Watts 1996). Watts and colleagues reported that men in marriages not only perpetrated forced sex (25%) but also withheld sex (17%) to punish or discipline their wives and that men who perpetrated physical violence were more likely to withhold sex and have multiple concurrent sexual partners (Watts, Keogh *et al.* 1998).

IPV is rooted in the customary practice of Zimbabwe which regards wife beating as a correctional measure that a man may use towards his wife, though he should not cause visible marks on her (Holleman 1952, Schmidt 1992, Makahamadze, Isacco *et al.* 2012, Matavire 2012). It is considered as chastisement such as that done to a child (Njovana and Watts 1996).

Anthropological work done in Zimbabwe revealed that a man could beat his wife when she committed serious offences against the marriage contract such as denying him conjugal rights, failing to cook, clean the house, or care for the children (Holleman 1952, Schmidt 1992, Matavire 2012). These circumstances were interpreted as refusal to obey the husband's authority. Recent evidence substantiates this finding that women themselves (53%) especially younger women still regard wife beating as a justifiable, normal and acceptable disciplinary measure (Hindin 2003). Such an exercise of male power and its justification by women may help to explain the high prevalence of sexual violence, 21% and 37%, reported earlier by Rusakaniko, Mushunje *et al.* (1997) and Watts Ndlovu *et al.* (1997) respectively in Zimbabwe.

Osirim (2004) argues that IPV was associated with the socio-structural and macro-economic hardships during the Economic Structural Adjustment Programme (ESAP) in the 1990s in Zimbabwe. ESAP had the effect of limiting men's economic power in the family which subsequently limited their power to control their spouses and men resorted to violence to assert their control over their intimate partners. This analysis is supported by Jewkes who remarks that men's power is rooted in their ability to economically control women, failure of which makes them violent (Jewkes 2002). Evidence from the ZDHS demonstrates that women who belonged to the lower economic quartile were more likely to report being abused than those in the higher

economic quartile (ZIMSTAT and ICF 2012). This argument suggests that the rapidly increasing poverty in Zimbabwe since 2000 may have an impact on the levels of IPV. Violence against women was also witnessed during key moments of Zimbabwe's political history including the liberation war, rounding up of unaccompanied women in mid-1980s (Schmidt 1992, Osirim 2004) and national elections. It may be argued that the nurturing of violence in the public sphere serves to socialise men to perpetrate violence and women to passively accept violence as a normal practice.

2.14 Theoretical and conceptual frameworks

2.14.1 Feminist perspectives on violence against women

This study draws on feminist perspectives on gender-based-violence to contextualize and explain IPV and risk of HIV in Zimbabwe. While a large body of feminist work on gender-based-violence has been developed over the last few decades, with different perspectives on understanding the problem, there is some agreement on the underlying roots of violence against women and its enmeshment in gender power inequalities and the social construction of masculinity and femininity. Feminist theorists have highlighted how violence against women cannot be understood outside of broader social gender inequality that exists between men and women across cultures and history. Almost every traditional African society was once patriarchal. Women were controlled by men, their position being decidedly secondary and subordinate. One of the early and influential second wave feminists, Ann Oakley argues that the differences between men and women are largely the construction of society and not about sex differences and such a perspective has been well accepted in the social and health sciences more broadly (Oakley 1972). It is these differences of gender, however, that are used to justify

inequalities between the sexes and the appropriation, by males, of the major part of power, leisure, time and resources. Customary practice allows the subordination of women to continue as a normal way of organising society and was supported in Africa by the colonial administrations. This law was continued by the independent Zimbabwean government thereby continuing to denigrate the position of women (Gaidzanwa 1998). Feminists argue that IPV will continue until the systematic inequality between men and women is addressed (Bowman 2002). Women's sexuality and health is a factor of their feminine subordinate social position (Courtenay 2000). In the African context, it has been argued that the widespread abuse of partners emanates from the uneven distribution of power within traditional African marriage relationships, the exercise of power by the extended family over the married couple, the acceptance of male promiscuous behaviour and polygamy, and the almost universal institution of bride price. Before the girl is married, the power to control her life rests with her father and brothers which upon marriage as defined by bride price, is transferred to the husband. Women's sexuality therefore falls under the control of men throughout a woman's life. Feminists such as Du Toit and Gouws (2005), Dutton (1994) and Dutton and Nicholls (2005) argue that patriarchy is a cultural male enterprise that requires violence or the threat of it in order to survive.

Feminist understandings of gender-based-violence call for realignment of means of dealing with larger gender inequalities at a socio-political level and their complex intersection with class, race, and other forms of inequality that facilitate poor, young women's vulnerability to unequal relationship and gender-based-violence. In addition, feminists also call for gender relations which include redistribution of gender power in favour of women and replacing violence with communication and discussion to resolve conflict to enable safer relations between partners. The

acknowledgment of the complex intersection of gender power inequalities with class and education and other forms of power inequality has also been fore-grounded in studies on violence against women (Vetten and Bhana 2001, Jewkes, Levin *et al.* 2003, Boonzaier 2005, Reddy and Dunne 2007, Ratele 2008, Shefer, Ratele *et al.* 2008, Clowes, Shefer *et al.* 2009). To cite two recent examples, there is evidence from the IMAGE (Pronyk, Hargreaves *et al.* 2006, Pronyk, Kim *et al.* 2008) and Stepping Stones (Jewkes, Nduna *et al.* 2008) studies in South Africa that women's economic empowerment and education on gender equitable and sexual practices may yield good results in the prevention of IPV and risky sexual behaviours.

2.14.2 Social learning theory

The theory which was developed by Bandura uses the concept of modelling to explain how behaviour is learned by observing role models (Bandura, Ross *et al.* 1961). In modelling, one imitates or models the behaviour of a person they consider as important, influential or successful (Nutbeam and Harris 1998, Glanz, Rimer *et al.* 2008, Akers 2009, Wall and McKee 2012). Parents are usually role models for children. This theory helps to explain why girls who witnessed their mothers being abused by their partners are more likely to be abused in their adult relationships and similarly boys who witnessed their fathers abusing their partners are more likely to become abusers. Apart from observing violence, girls also learn the social and moral justification for violence and will more likely justify violence when it is perpetrated against them. However, this may not apply in all circumstances as children who witnessed violence or were abused may also learn positive behaviour that help them avoid being abused in later life. The theory shifts blame from the perpetrator, in this case men, which may, however, limit efforts

to prevent further perpetration of violence. Despite these limitations, the theory helps us to understand the inter-linkages between child abuse and abuse in adulthood.

2.14.3 The ecological approach to IPV

Heise (1998) conceptualized the ecological approach in gender-based-violence with many other researchers subsequently applying it in violence studies (Grauerholz 2000, Oetzel and Duran 2004, Campbell, Dworkin *et al.* 2009, Obasaju, Palin *et al.* 2009). Heise argued that gender-based-violence is a multi-faceted phenomenon that is grounded in an interaction among several factors across personal (or individual), relationship, family, community and more broadly societal spheres of influence. The current study examined personal factors such as age, relationship dynamics which include frequency of conflict, familial factors like witnessing parental violence, community factors for instance beliefs and attitudes towards wife beating, and finally the society-wide factors such as patriarchal domination of women by men. These aspects were tested in both qualitative and quantitative research and the extent to which they are related to IPV during pregnancy were examined. The approach helped to understand IPV during pregnancy in a broader spectrum and may also help develop comprehensive interventions to prevent IPV. For example, the ecological framework helps us to examine the influence of the health system, as a social ecology, on IPV after HIV testing and disclosure.

2.14.4 Theoretical framework

Figure 1 illustrates the conceptual framework for the study, showing how some of the theoretical concepts discussed above directly and indirectly create vulnerability for pregnant women to be abused by their partners. In this thesis I started out with the feminist perspective and the social

learning theory but later realised that some factors were better understood through the ecological framework. In order to integrate all the concepts of these frameworks, I ended up with a conceptual framework that considers all the theoretical frameworks discussed above. Combining all the theoretical frameworks helps to gain a better understanding of both the immediate and distant factors in their relations with IPV, whether during pregnancy or after HIV disclosure. Poverty, a social determinant of health, influences the subordination of women to their partners who may have better socio-economic positions than them (Jewkes (2002). Due to poverty, some women partner with men who are more economically empowered than them, sometimes for financial gain, but who unfortunately end up abusing these women. The patriarchal ideology which socializes women to be loyal, respectful and subordinate to men is internalized by women who endorse the use of violence to punish wrong doing. Negative masculine forms such as sexual conquest and having multiple sexual partners create vulnerability for women (Jewkes, Sikweyiya *et al.* 2011). Alcohol abuse makes men lose their sense of judgment, reduces inhibitions and impairs the ability to interpret social cues, leading to quarrels and IPV in intimate relationships (Jewkes 2002). The influence of the health system through teaching and encouraging disclosure of HIV status creates vulnerability for women as those who test without partners' permission or test and disclose a positive status, are vulnerable to being abused. HIV testing and disclosure of HIV status is a gendered process with many more women than men testing and disclosing their status to their partners, resulting in IPV. Some of the HIV prevention messages offered to women during antenatal care promote the abuse of women, for instance, encouraging women to have sex with their partners even under difficult and painful conditions in order to discourage them from having sex with other women. Frequent conflict triggers IPV in relationships after HIV testing and disclosure when partners blame each other for HIV infection.

This chapter reviewed literature on prevalence of IPV during pregnancy and risk factors for IPV globally, in Africa and in Zimbabwe. The chapter assessed previous literature on the association between HIV and IPV and noted the gaps with respect to IPV during pregnancy in Africa and the contradicting information on the association between IPV with HIV infection, as well as the unavailability of research on the response of the health sector to the problem of violence during pregnancy in resource limited settings. It contextualized IPV during pregnancy using three theoretical/conceptual frameworks. The next chapter presents the methodology of the study which is contextualized in the theoretical framework discussed above.



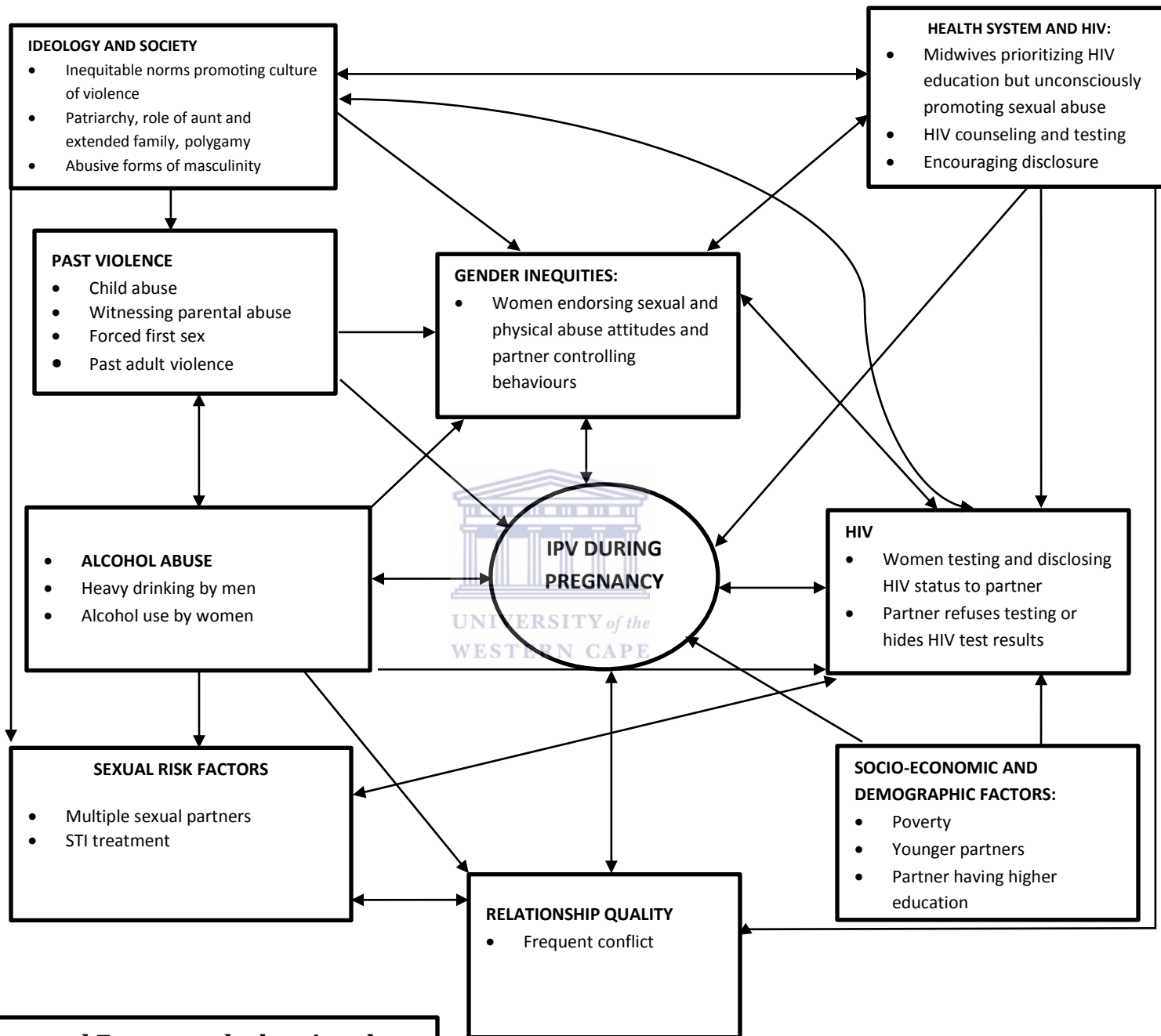


Figure 1: Conceptual Framework showing the interconnectedness of HIV, IPV and other factors

Chapter Three

METHODOLOGY

3.1 Introduction

This section presents the methods of the study's three phases with three designs. The section begins with the study designs in the order in which the study was conducted- systematic review, exploratory qualitative phase and lastly cross sectional quantitative study. The systematic review of literature on prevalence of and risk factors for IPV in Africa, done in 2009, built on the broader conceptual literature review and helped to situate the study in the context of empirical research in Africa. This was followed by the qualitative phase of the study in 2010 which helped to inform the design of the questionnaire for and interpret findings from the quantitative cross sectional survey of postnatal women conducted in 2011.



3.2 A mixed methods paradigmatic approach

A mixed methods approach is a field that is gaining momentum in social science and public health research. Johnson and colleagues defines it as follows,

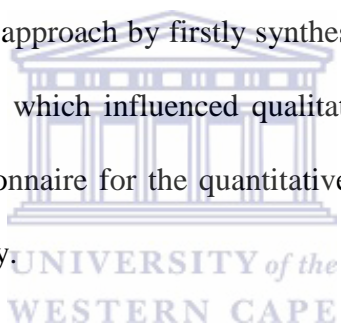
“Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration...A mixed methods study would involve mixing within a single study; a mixed method program would involve mixing within a program of research and the mixing might occur across a closely related set of studies.” (Johnson, Onwuegbuzie *et al.* 2007:123)

The key feature of mixed methods research is the “synthesis that includes ideas from qualitative and quantitative research” (Johnson, Onwuegbuzie *et al.* 2007: 113). The approach emanates from the idea that human behaviour cannot be understood by one method or paradigm but that

human behaviour has multiple realities which need multiple ways of understanding it, and that the aim of research is not to establish facts but to understand these multiple realities (Schütz 1945, Ivanoff and Hultberg 2006). This idea was influenced by phenomenological theoretical work on the concept of triangulation which was coined by Webb, Campbell *et al.* (1966) but defined more broadly by Denzin (1978: 291) as “the combination of methodologies in the study of the same phenomenon”. Denzin listed the different ways of triangulation which include triangulating data, investigators, theories, or methods.

By data triangulation, Denzin (1978) referred to the use of a variety of data sources to understand a reality or phenomenon. This study triangulates data from different sources which include published data from the systematic review and meta-analysis, clinic registers for woman’s HIV test results, data from quantitative survey of postnatal women as well data from midwives’ accounts of IPV during pregnancy and their own perceptions of IPV. The triangulation of theory in which different theoretical perspectives are used to understand reality was used in this study through the use of the social learning, feminist and ecological theory in analysing risk factors for IPV. A diagrammatical conceptual framework was used to show the interconnectedness of various factors associated with IPV and links with HIV. Lastly Denzin defined the methodological triangulation as the use of different methods of studying a research problem. This study used a variety of methods of data collection which include face-to-face interviews- both questionnaire and in-depth unstructured qualitative interviews, clinic records reviews, focus group discussions as well as desk review for the systematic review. It moves research beyond “qualitative versus quantitative” to an approach with research methods complementing each other.

The mixed methods approach increases reliability of research results, increases the thickness and richness of data and analysis and helps to uncover contradictions which may lead to a deeper understanding of complex phenomena. It also seeks convergence and corroboration of results by studying a phenomenon using different methods and enhances complementarities (Johnson, Onwuegbuzie *et al.* 2007 Razum and Gerhardus 2002, Johnson and Onwuegbuzie 2004, Farmer, Robinson *et al.* 2006). Whether the quantitative should follow or precede the qualitative component or be done simultaneously have been discussed extensively by Bryman (2007). Bryman (2007) suggested that if the quantitative follows the qualitative, the qualitative results should not just be used as a “springboard for hypothesis testing” but also to interpret quantitative results. This thesis followed this approach by firstly synthesizing existing published literature in the form of a systematic review which influenced qualitative research; qualitative research in turn helped to design the questionnaire for the quantitative survey and to assist explaining the results from the quantitative study.



However, the mixed methods approach is expensive, time consuming, the researcher may have difficulties analysing conflicting data, and it may be difficult for a single researcher to do mixed methods research (Johnson and Onwuegbuzie 2004) as in a doctoral thesis.

3.3 Study setting

The study was conducted at six public primary health facilities in the south-western low-income (high-density) residential suburbs of Harare in Zimbabwe. The facilities were managed by the Harare City Council Health Department. The clinics offered a wide range of primary health care services including antenatal and postnatal care. The six facilities are about 7 to 25 km from Harare central business district. Many pregnant women lived within a walking distance to a

facility with others having to use public transport to reach a health facility. The clinics opened at least once per week for antenatal care services and about four times for post-natal care. All pregnancy cases that were likely to require special care were referred to two tertiary hospitals (Harare Central Hospital and Parirenyatwa Group of Hospitals). Most pregnant women in Harare delivered (91.6%) (CSO and Macro 2007) and received 10 day and 6 weeks postpartum check-up (80.4%) from a health facility (Munjanja, Nystrom *et al.* 2009)⁴. Each facility registered between 10 and 30 new pregnant women a day (Clinic Monthly records 2011). Although the health system was weakened by the political and economic situation in the country, maternal health care services in Harare City Health clinics did continue to run. As part of government policy, all pregnant women were offered HIV testing through the provider-initiated HIV counselling and testing programme. This was done on pregnant women's first visit. Those who tested positive were registered for PMTCT. Nurses conducted HIV counselling and testing using Determine rapid test (Abbott Laboratories, Abbott Park IL, USA) and positive results were confirmed using Capillus (Trinity Biotech, Bray, Co Wicklow, Ireland). If still discordant, western blot testing was conducted to resolve the conflict.

⁴ Many of those women who do not report for postnatal mother check-up as reported in the DHS, which is 6 weeks after giving birth, are captured in this study during the 10-day postnatal care clinics for child health clinic (not for mother check-up) which may not have been reported in the DHS. The limitation of recruiting only from six weeks postpartum was noted well before embarking on the study. To address this limitation, and knowing that in most African studies postnatal mother check-up is low, I then planned the study to include women in child health clinics (including immunisation). This therefore increased the chances of recruiting women who were recently pregnant. Six weeks postnatal mother check-up is usually attended by fewer (43%) women (ZIMSTAT and Macro 2012) but if women who attend baby clinics including immunisation clinics are added to the sample, it constitutes a near representative sample of women who were recently pregnant (80%) (Munjanja *et al.* 2009). I used the figures from Munjanja *et al.* (2009)'s population based study on maternal and perinatal mortality which had a larger sample size (N=45158) than that of the DHS (N=2448). Munjanja *et al.* (2009)'s study was a maternal and perinatal mortality study conducted in Zimbabwe and had specific measurements that were likely to give more reliable data than the DHS which is not focussed on maternal health. However, it remains a limitation that about 20% pregnant women do not visit the postnatal care clinic after giving birth and our study could therefore have missed interviewing some recently pregnant women by interviewing postnatal women. This limitation was further discussed in the in the section on limitations.

3.4 Ethics

The study whose full ethical statement is in Appendix A, received ethics approval from the Medical Research Council of Zimbabwe, the Joint Parenyatwa and College of Health Sciences Research Ethics Committee and the University the Western Cape's Senate Research Committee. Ethical clearance letters are attached in Appendix B-D. Permission to conduct the study at the clinics was obtained from the Harare City Council Health Directorate (Appendix E). The research fieldwork followed WHO (2005) ethical guidelines for researching violence against women and girls. Participants signed written informed consent (Appendix G) and assent (Appendix H) in the case of those below age 18 years after the information sheet (Appendix F) was read to them. Confidentiality was maintained throughout the study. To protect the women, no identifying information was used in the manuscripts or in this thesis and clinic names were replaced with letters of the alphabet and pseudonyms. The HIV test results were accessed with written permission from the women. Respondents who needed help were referred to organisations that work against gender-based-violence in Harare. Support to the fieldworkers was ensured by organising counselling with a clinical psychologist for research assistants who needed help. A deeper reflection on the ethical and psycho-social dimensions of this research is included in the Discussion (Chapter 10).

3.5 Systematic review methods

The aim of this systematic review was to systematically assess literature and sum up the evidence from original empirical research conducted in Africa on prevalence and risk factors for IPV among pregnant women. Paper I presents the results of the systematic review. The review also focused on the relationship between IPV and HIV. The review followed the 27 check list items and flow diagram of the Preferred Reporting Items for Systematic Reviews and Meta-

Analyses (PRISMA) (Liberati, Altman *et al.* 2009, Moher, Liberati *et al.* 2009) in the planning, conducting and reporting results from the review and the meta-analysis. Peer reviewed journal articles were primarily obtained by searching electronic databases using Ebscohost search engine. The following medical, health and social sciences databases were searched: Medline, Google scholar, Pubmed, SocIndex, Academic Search Premier, Family and Society Studies Worldwide, PsycArticles, Women's Studies International, Africa Wide Information databases to obtain articles on violence during the time of pregnancy. The search period from 2000 to 2010 period was chosen because studies only emerged from Africa from late 1990's. No systematic review was found on the topic in Africa. Searches were conducted using the following key words: IPV, gender-based-violence, violence against women, pregnant women, spousal violence, domestic violence, wife beating, wife abuse, spousal abuse, violence in pregnancy, violence and antenatal care, Africa, prevalence, risk factors, associations. Additional searches included the reference lists of the articles being reviewed and these were checked for relevant articles. An independent hand search was also conducted on specific African journals (e.g. Annals of African Medicine). Full text of some articles that only showed abstracts in the electronic databases or journals searched were obtained by emailing authors of the papers. The articles were checked for duplications in the different databases searched.

Published literature was searched for original, quantitative research studies. Our search criteria included articles reporting research conducted in any African country using either cross sectional, cohort, case control, or randomized controlled trial study designs. Articles must have been peer reviewed and published in English in academic journals. In addition, studies should have been conducted with pregnant or postnatal women (within two months of giving birth). Women had to be the primary source of information. The focus of the articles was prevalence of

IPV (physical, sexual and emotional) and/or risk factors for IPV among pregnant women. Intimate partners were defined as past and current spouses, boyfriends, fiancées, whether married, cohabiting or dating.

A data extraction form was designed to collect the following information: country where data were collected, study design, sample size, response rate, target population, sampling method, tools used, case definition, interview type and outcomes from each study. The author was the main reviewer to extract information and a second reviewer extracted information to determine convergence. Papers were examined to ensure that they do not display the same data-set in different papers. Two papers that reported from the same data-set but reported different information were both included. Conflict in scoring between the reviewers, was reached by consulting a third reviewer. Study authors were contacted in the case of unclear or missing data. The search identified 131 abstracts but after screening these abstracts 95 were excluded because they either did not primarily focus on Africa; were not based on original research or did not have information on risk factors or prevalence. A further screening dropped 17 papers which did not focus on IPV during pregnancy leaving 19 studies which were finally reviewed.

3.6 Analysis of systematic review data

In assessing the quality of data the study adapted a criteria developed by Alhabib, Nur *et al.* (2010) and the following criteria was used: 1) Specification of the target population; 2) use of strong sampling methods (e.g. random sampling); 3) adequate sample size (at least 300 participants); 4) adequate response rate ($\geq 80\%$); 5) measurement with valid and tested instrument [e.g. Conflict Tactics Scale 2, Abuse Assessment Screen]; 6) reporting of confidence intervals or standard errors; 7) reported attempt to reduce observer or other forms of bias; 8) adjusted for

confounding variables. The instruments were categorized into conflict tactics scale, abuse assessment screen, the WHO questionnaire for measuring domestic violence against women and lastly ‘own tool’ where no known instrument was used.

Systematic review data were analysed by conducting a fixed effect meta-analysis using STATA statistical software version 11 (StataCorp 2009). Forest plots with prevalence and 95% confidence intervals were plotted. We assessed heterogeneity between studies by using the I-square statistic and by visually examining the forest plot for overlapping confidence intervals. Since there was considerable heterogeneity, the pooled result from meta-analysis for all variables was not used except for the overall IPV during pregnancy.

Risk factor analysis was conducted by tabulating and describing odds or risk ratios with associated 95% confidence intervals and *p*-values. Meta-analysis of risk factors was not possible because many studies did not report sufficient data to conduct meta-analysis. Chapter 5 (Paper I) reports the findings of the systematic review.

3.7 Qualitative research

The objective of the qualitative research was to describe pregnant and postnatal women’s experiences of violence during pregnancy and to understand health workers’ perceptions of IPV during pregnancy (Paper IV and V) including how midwives respond to abused women in antenatal care. This information was important in the design of quantitative tools as well as in helping to explain the quantitative data. The methods included focus group discussions with pregnant and postnatal women and in-depth interviews with health workers which are discussed below.

3.8 Focus group discussions (FGDs)

A focus group discussion is a data collection method that uses a moderated group discussion (4-12 participants) based on the participants' perceptions, views and experiences of a topic decided by a researcher (Tong, Sainsbury *et al.* 2007, Carlsen and Glenton 2011, Carlsen and Glenton 2012). A key feature of the FGDs and one that distinguishes it from interviews is that it emphasizes the interaction among participants with the researcher only guiding the discussion while interviews emphasize interaction between researcher and participant. FGDs help to better understand society from the point of view of the researched people. FGDs are commonly used in pre- or post-surveys to elicit or explore stakeholder views about a social or health issue. Although the focus group discussion is 'focused' on a collective activity (Kitzinger 1994, Reed and Payton 1997), there is also room to use the focus group discussion to discuss participants' views in a group since the group shares societal views. The advantage of using FGDs is that it capitalizes on group interaction to get the rich data about the experiences of people (Webb and Kevern 2008). Kitzinger (1995) argues that it captures data that would be difficult and somehow inaccessible in face to face individual interviews. In our study, the rich data of how violence takes place in intimate partnerships during pregnancy, an issue that is regarded as private and domestic was shared in FGDs as women reported them as community views. FGDs help to give validity to research as issues that are discussed are confirmed, reinforced or contradicted within the group setting (Webb and Kevern 2008) giving the researcher credible data thereby giving it a high level of face validity (Krueger and Casey 2009).

Seven exploratory FGDs were held with 64 pregnant and post natal women in order to get information that helped to fine-tune the design of the questionnaires and to help in explaining

quantitative data. Four of these were held with pregnant women to explore issues related to IPV during pregnancy in general and three were held with women attending postnatal care to explore issues on HIV status disclosure and IPV. However, the interview guide (Appendix I) did not limit either group from discussing anything related to the study. Participants were any pregnant women between 15 and 49 years old attending antenatal care or postnatal care at the study clinics. While the study focused on the time of pregnancy, separate FGDs with pregnant and postnatal women were held to assess the extent to which we could be able to get information about disclosure of HIV and IPV experiences in the entire pregnancy in each group. With pregnant women, it was realised that we could only get information about IPV up to a certain extent compared to postnatal women who could report until they delivered, thereby maximising the reporting time. Women were approached at the clinics where they queued to receive antenatal or postnatal care services. Based on Carlsen and Glenton (2011)'s findings from a review of FGDs in research that the median number of participants was eight, it was decided that eight participants would be selected to participate in each FGD. When the number of women at the time of our arrival was higher than 10 women, systematic sampling was used to select only ten women to participate in the focus group discussions. When there were fewer than 10 women all were included in the FGD. Introducing the study was done by reading the information sheet with all safety and ethical issues to the clients and asking them if they were willing to participate in the study. No woman refused to participate in all the sessions. Women signed the informed consent forms. Discussions were conducted in a private room at the clinic.

All women were reported to have tested for HIV during their initial ANC visits through the provider initiated HIV testing and counselling (PITC) (personal communication with nurses),

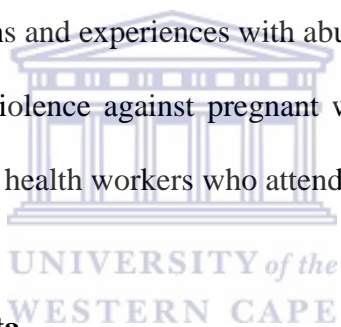
although we did not verify their test results. Women were requested to complete their demographic information anonymously.

FGDs were led by a researcher and a trained female research assistant audio-recorded the discussions which lasted 1 to 1½ hours. Field notes were also taken. The FGD Guide (Appendix H) covered the major thematic areas contained in the validated IPV research instruments designed by the WHO (2005) which were used in the broader study. The discussion guide was flexible to allow related but unforeseen issues to be discussed. The initial questions focused on women's household chores, planning in the household, and likes and dislikes during pregnancy. The discussions eventually progressed into the more sensitive issues of IPV and HIV. To enable open discussion, participants were invited to narrate their experiences as stories they had heard about other people. Participants were reminded not to disclose their HIV status during the discussions. Participants were served with refreshments during the discussions to create a natural environment and enhance discussion.

3.9 Interviews with health workers

Seven key informant interviews were conducted with six midwives (one midwife per clinic) and an additional HIV testing counsellor was interviewed. An interview guide (Appendix J) was used during the interviews with more probing helping to elicit information from informants. Purposive sampling was used to select health workers to interview. This was important in order to select a health worker who had the information we wanted. The researcher selected a senior health worker responsible for running the antenatal care at each facility and this was mostly a sister in charge of the maternity clinic. These officers were also responsible for compiling reports of all their activities in the maternity wards. They were also key, because they were able to speak about

the operational and management of maternity services, including how the clinic dealt with identified cases of violence. In some cases, they assisted with the delivery of care to pregnant or post-natal women to alleviate the shortage of maternity nurses. They were therefore knowledgeable about management as well as operational and technical issues in the maternity and post-natal clinics. At one clinic the researcher interviewed an HIV counsellor after being referred by the key respondent to him and obtained information about the process of testing and disclosing of HIV status and its challenges. The interviews, which were conducted in the matron's offices, helped us to secure information on the forms and dynamics of violence that midwives identified and how they identified abused women or were reported to them by pregnant women, their perceptions and experiences with abused women. This information helped in describing the dynamics of violence against pregnant women (both HIV positive and HIV negative) from the perspective of health workers who attended to abused women.



3.10 Analysis of qualitative data

Audio taped data from focus group discussions and in-depth interviews were transcribed verbatim. Transcription reliability and accuracy were checked in a random sample of transcripts by an independent transcriber. The transcripts that were in Shona were translated to English and back translated by an independent transcription specialist, to compare with the original script if there were any deviations. There were no significant deviations that required redoing the transcriptions and translations. The transcripts were loaded into a qualitative data management programme called OpenCode, where data were classified into codes and categories. Through repeated reading of the transcripts, the data themes were formulated around the objectives of the study.

Data analysis followed the concept of thematic content analysis, which is defined as bringing all data together, comparing and discussing related themes and examining their relationship within individuals and between groups (Webb and Kevern 2008). Braun and Clarke (2006) simply define it as a way of sorting, identifying, analysing, and reporting data patterns called themes within a data set. The whole process involves reading and re-reading through text to identify keywords, terms, or ideas that repeat in the transcripts. The fragments of words or ideas which are meaningless if viewed alone were grouped together into a single theme (Aronson 1994). Boyatzis (cited in Fereday and Muir-Cochrane 2008: 83) argues that a theme, “at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon”. The organisation and reporting of data followed the process of decontextualisation and recontextualisation of the text. By decontextualisation the researcher lifted out parts of the transcripts (e.g. quotations) so that they may be closely analysed together with other similar respondents’ quotes or situations before this is recontextualised by ensuring these quotes and situations maintain their context from which they were collected thereby preventing reductionism. This maintains respondents’ accounts of reality (Malterud 2001). To some extent, data analysis was influenced by our knowledge of the existing theories which influenced the study of IPV more broadly and learning deductively from theory as neglect of theoretical underpinnings reduces the scientific quality of any analysis (Malterud 2001). However, thematic content analysis helped to draw on naturalistically occurring themes (Joffe 2011) that were evident in the data that were collected. The researcher therefore conducted a more inductive analysis, grounded in our data much more than relying on deductive learning. Although data analysis was done after collecting the data, it is important to note that some listening to FGDs soon after recording and thinking through the data was done to gain a better

understanding for the following day's FGD, so as to revisit or clarify certain issues and confirm issues left hanging in the previous day.

Similarities and differences between separate groups of data that emerged were noted as they indicated areas of agreement and of potential conflict respectively (Fereday and Muir-Cochrane 2008). This saw the clustering of similar information in each theme with some differences recognised by women in different circumstances. For example, those in their early stages of pregnancy reported less or different sexual violence than those in the last trimester as were differences between younger and elder women. New codes were formulated as themes continued to emerge during the process of re-reading the scripts. The meaning of the contents in each theme was also analysed in the interpretive phase (Fereday and Muir-Cochrane 2008) by connecting the units into an explanatory framework consistent with text. Each theme was then named with a phrase that summarises the content of the theme, sometimes quoting a catchy phrase from a respondent (See Paper IV). The major themes that emerged from the transcripts include the widespread coerced sexual intercourse especially during last pregnancy trimester, how midwives perceive and deal with abused pregnant women, the influence of social institutions on violence during pregnancy and how women are abused after HIV disclosure.

3.11 Quantitative survey

Both the literature search and the qualitative research were instrumental in the design of the questionnaire. For example, I learnt from the focus group discussions, as noted by Shumba (2001), that it is common practice to discipline children by beating them both at school by teachers and at home by parents. As a result our variable for measuring physical violence in

childhood had to go beyond just beating to ask about “excessive” beating so as to distinguish violence from what would be considered “normal” beating aimed at disciplining.

3.12 A cross-sectional study

A cross sectional study design was used and postnatal women attending ANC at six primary care clinics in the high-density suburbs in Harare were recruited. The inclusion criteria were postnatal women aged between 15 and 49 years, on their 10th day or 6th week postpartum visit. The study was both descriptive and analytical. The study described the dynamics and prevalence of HIV, IPV and IPV after disclosure. The study analysed associations between IPV among pregnant women and pregnancy, HIV status, disclosure, HIV risk behaviours, gender inequity and male partner characteristics. Participants were interviewed to determine lifetime IPV, IPV during pregnancy, IPV after testing for HIV, child abuse, HIV risk behaviour, gender power and attitudes towards disclosing HIV status. The results of the cross sectional survey are presented in Papers IV and V. The design of the quantitative study questionnaire benefitted from the results of the qualitative research.

3.13 Sampling procedures

The sample size was calculated using Epi Info statistical package. The confidence level was set at 95%, a power of 80% and an Odds ratio (IPV and HIV seropositivity) of 1.48 from a related IPV study among pregnant women in Soweto, South Africa (Dunkle, Jewkes *et al.* 2004). The expected prevalence of IPV in the unexposed group was 8.3% (CSO and Macro 2007) and the expected IPV frequency in the exposed group was 11.8%. The calculated sample size was 2100. The recruitment of participants was based on availability with busier clinics having more participants recruited than less busy clinics as sometimes research assistants from less busy

clinics were moved to busier clinics. The busier clinics opened more days than the less busy clinics especially for 10 days post-delivery child care sessions resulting in more participants being recruited from busier clinics than the less busy clinics. As a result, the recruitment of participants proportionally matched facility size giving a stratified sample.

The six public health facilities that offer ANC services were purposively chosen because of their longstanding relationship with the local university medical teaching programme. Proximity of clinics to each other was also considered to facilitate fieldwork logistics. All eligible postnatal women were recruited until the required number of participants was reached. Recruiting all presenting women helped to minimise selection bias. Recruitment and interviewing took four months between May and September 2011.



3.14 Questionnaire design

The WHO (2005) questionnaire for researching violence against women and girls and the Sexual Risk Behaviour Questionnaire (SRBQ) (Gilbert, El-Bassel *et al.* 2007) to measure violence and sexual behaviour respectively were adapted for our study respectively. The combined questionnaire (Appendix K) was cross-culturally validated at one clinic following the qualitative research with pregnant and postnatal women at six clinics. Since the WHO questionnaire was designed to measure violence in a general population, the adaptation process added a time reference to abuse questions so that it referred to abuse during pregnancy.

The WHO questionnaire in this study enabled us to make comparisons with data from other countries that used the same instruments. The resultant questionnaire contained questions addressing the following subjects: socio-economic and demographic characteristics of the

participants, history of violence (child violence, forced sexual debut, ever experienced violence in adulthood), acts of IPV, partners' relationships, HIV risk behaviours, HIV testing and status disclosure, reproductive health issues, and pregnancy decisions and access to antenatal care during pregnancy. IPV questions were phrased in a behaviour format to avoid respondents identifying themselves as abused or battered (Garcia-Moreno, Jansen *et al.* 2006) and to encourage greater disclosure, since much abuse among the Shona people of Zimbabwe is regarded as chastisement and discipline (Schmidt 1992, Hindin 2003). The questionnaire was translated to Shona and back-translated into English to ascertain accuracy, cultural acceptability and cognitive understanding. It was administered in the first language of the respondent (Shona). To check data quality the questionnaire contained two crucial questions, one of physical violence and another of sexual violence that requires the same type of information in different positions in the questionnaire (Fisher and Foreit 2002). This helps to check the consistency of the response to establish the reliability of the data being collected. There were insignificant differences ($p>0.1$) in the responses to the two questions. The questionnaire was pretested with 60 pregnant women attending ANC at one of the health facilities in our study. In this one day exercise, the validity and reliability of the research tool were checked. No major changes were therefore made to the questionnaires and as a result the pre-test completed questionnaires were included in the study. Questions' directness, clarity, average time needed to complete the questionnaire, logistical and ethical issues were assessed in the pre-test.

3.15 Variables and measurements

a) Intimate partner violence (IPV): The questionnaire contained physical, sexual and emotional IPV questions (See Appendix J). Each form of violence contained a set of questions that were used to measure different acts of that form of violence perpetrated on the woman by a

partner. If the respondent's response was positive we sought to measure past adult IPV focusing on the last 12 months before the respondent became pregnant using the question: "Has this happened during the 12 months before the pregnancy?" (See Appendix J – sub-question/Column B in questions 606-608). Abuse during pregnancy was measured using the question, "Has this happened during the most recent pregnancy?" (See Appendix J – sub-question/Column "C" in questions 606-608). The questionnaire also measured the prevalence of IPV after one had disclosed her HIV test result by asking if any of the acts reported had taken place during the period after she informed her partner about her HIV status. The following follow up question was used: "Has this happened after you disclosed your HIV test result to your partner during pregnancy?" (See Appendix J – sub-question/Column D in questions 606-608). All these questions carried Yes or No responses which the interviewers ticked. Yes was coded 1 while No was coded 0. Frequency of partner violence during pregnancy was measured. The following follow up question was asked: "During pregnancy would you say that this has happened once, twice or thrice/more?" (See Appendix J – sub-question/Column E in questions 606-609) Interviewers would tick 1, 2 or 3+ depending on the respondent's response.

b) Childhood abuse: Childhood abuse was categorised into physical abuse and sexual abuse. Physical abuse was measured using the question, "Before the age of 15 years, has anyone ever excessively beaten or physically mistreated you in any way?" Respondents were asked to answer Yes if it was positive and No if it was not in the affirmative. Sexual abuse was assessed using the following question, "Before the age of 15 years, has anyone ever forced you to have sex or to perform a sexual act or ever touched you sexually when you did not want to?" Follow up questions and coding was similar to those in sexual violence.

c) Gender equity Attitudes

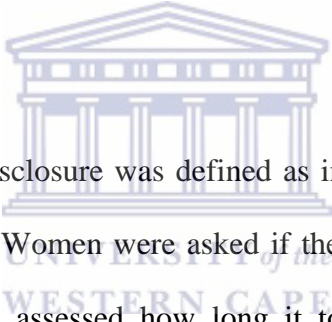
We measured attitudes towards gender equity using the WHO (2005) questionnaire. The questions asked focused on whether they justified wife beating in each of the six situations presented. Attitude towards sexual abuse questions asked a woman if a married woman may and can refuse sex in each of the six situations presented. Partner controlling behaviours were measured using six questions and they directly related to a woman's partner.

d) Risky sexual practices

We measured sexual risk practices using questions drawn from the Sexual Risk Behaviour Questionnaire developed in the United States (Gilbert, El-Bassel *et al.* 2007) and repeated in South Africa (Dunkle, Jewkes *et al.* 2004). Altogether there were 13 sexual risk categories. The questionnaire asked a respondent's number of lifetime sexual partners and if the respondent engaged in risky sexual activities (anal sex, sex with partners who inject drugs, partners who have had STIs). Respondents were asked if ever they contracted an STI and also used their HIV status as a proxy for sexual risk. Forced first sexual intercourse was assessed by asking whether the woman was willing or not when she had sex for the first time. Transactional sex was measured using three questions from previous South African studies (Dunkle, Jewkes *et al.* 2004, Dunkle, Jewkes *et al.* 2007) that asked if a respondent had ever stayed with a partner longer than she wanted to in order to gain materially (cash or kind). The second question asked if she had ever had a relationship with a casual partner for material gain while the third question assessed if a respondent had ever had sexual relations with a once-off partner for material gain. Things that we asked if she ever transacted in order to receive include those that she could not afford herself, accommodation, food, school children needs, raising children, bills or social status.

e) Alcohol and drug use

Based on large variations in the measurement of alcohol use as found in the systematic review that I conducted, the study questionnaire included two crucial measures of alcohol abuse, frequency and problem drinking during pregnancy, in addition to whether a woman or her partner used alcohol or not. To measure the respondent's frequency of alcohol use, we asked if a respondent took alcohol nearly every day; up to twice weekly; up to thrice a month or less than once a month. The questionnaire measured the partner's problem drinking by asking if he faced the problems because of their use of alcohol: money, health, conflict in the family, problems with authorities such as bar owner or police. Questions on whether the respondent or partner ever abused drugs were also asked.

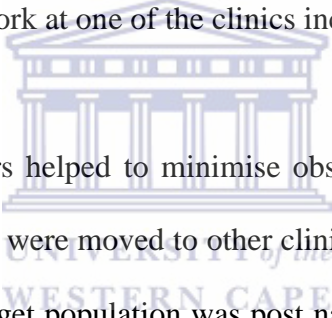


f) Disclosure of HIV status: Disclosure was defined as informing the partner the HIV results from recent antenatal HIV tests. Women were asked if they disclosed their HIV status to their partners. The questionnaire also assessed how long it took to disclose their status to their partners. We also asked women to report the reactions of their partners after they disclosed their HIV status. The questions had various responses, both positive (such as happy, supportive) and negative (such as sexual, emotional, and physical abuse). Information from this question helped to verify the use of violence after disclosure.

3.15.1 Conducting the interviews

Six female interviewers were recruited and trained for seven days to conduct fieldwork. The recruitment of interviewers considered applicants' attitudes towards gender and the gender-based-violence issue in addition to their research work experience. The interviewers were

recruited in line with the WHO (2001) guidelines and previous research in gender-based-violence (Jewkes, Dunkle *et al.* 2006). In addition, interviewers were young women between 25 and 30 years. Matching the age and sex of the participant and the interviewer helped to create an atmosphere of open discussion about sexual and violence issues (Jewkes, Dunkle *et al.* 2006). All interviewers had a degree in the social sciences or public health except one who did not have a degree but had been involved in similar research before. Most of the researchers had conducted or worked in positions or attachment positions in issues related to women's health/welfare or gender. The training covered gender-based-violence, vicarious trauma, interviewing skills; and safety and ethical issues in gender-based-violence. It included a day of role play using the study questionnaire and a day of fieldwork at one of the clinics included in the study.



A limited number of interviewers helped to minimise observation errors. One interviewer per clinic was deployed. Interviewers were moved to other clinics if the flow of participants was low at their designated clinic. Our target population was post natal mothers attending post natal care at the clinics. The mothers were in two categories. Firstly, there were women who were bringing their children to the clinic for immunization and review on the 10th day after birth. Secondly, there were women who were coming for gynaecological examination six weeks after birth. The first group visited the clinic on any of the clinic's scheduled four days of the week, while the second group visited the clinic on one day that each clinic reserved for them. Interviews took place in a private space, either in an office (depending on availability at the clinic or outside in the open space away from other people).

Women were recruited from the queue. Interviewers approached potential respondents on the queue and briefly introduced the study to them. In some cases after introducing the study to the

clinic staff, the clinic staff usually informed the mothers about our study or gave us an opportunity to introduce the study to the mothers waiting their turn. After the introduction and invitation, mothers would take turns to visit the study office our desk either before or after being served by the clinic nurses. If the approached woman expressed interest, she was invited to a private interview room where an information sheet was read to them in their local language and if they agreed to participate, they were asked to sign the consent form. Consent was also asked for access to their HIV test information kept in the clinic. To ensure anonymity, participants were assigned numbers during the interview which were used to link with their clinical records during the analysis of results. One-on-one interviews took place in a private room. Interviewers read out the questions to the participants who responded and the interviewers recorded their responses with ink on the printed questionnaire. In the case of women aged between 15 and 17 years inclusive, guardian consent was granted by the clinic's sister-in-charge before the woman signed the assent form as required by the Medical Research Council of Zimbabwe Ethics Committee.

The researcher provided overall logistic arrangements and daily supervision of fieldwork to ensure reliability and accuracy of data. Questionnaires were checked by the interviewer for completeness and correctness at the end of each interview before the participant left the health facility and at the end of each day's work by the researcher upon submission. Participants were offered some refreshments during the interview session. Interviews lasted for an hour.

3.16 Review of clinical records

The primary reason for reviewing the ante natal clinic records was to collect HIV status data. Access to the records was requested and obtained from the respondents and clinic staff. The

researcher took this responsibility to ensure the confidentiality of HIV result. The ANC clinic records of study participants were reviewed using the clinic record number as the way to identify the records. This information was later merged with the data of the questionnaire and applied in the analysis to assess the associations between IPV and HIV during pregnancy. The review also helped to check if any IPV was detected and recorded by health care staff on the mothers and documented in clinical records. This information helped to analyse the relationship between IPV and HIV during pregnancy. Reviewing was conducted in the clinic during clinic hours.

3.17 Analysis of quantitative survey data

Data was entered using the Key Three data management software package. Validation of data entry was done by re-entering 10% of the data. As only minor errors were observed in a few entries, we did not re-enter all the data⁵. The data were transferred to STATA version 11 for processing and analysis. After data cleaning and checking, frequencies and differences between groups were measured using the chi-square test at 95% confidence intervals and presented in two-by-two tables. Different forms of IPV and their prevalence were described with 95% confidence levels. For continuous variables such as age, the summary took the form of means with a 95% confidence interval and standard deviation as well as interquartile range. For binary variables, the summaries were presented as percentages with a 95% confidence interval. Bivariate relationships between IPV and other variables – socio-demographic, gender equity and sexual behaviours, HIV status - were then examined.

Previous studies on IPV assessed factors associated with IPV using just one act of violence (Yes/No response) which researchers are beginning to question its appropriateness in assessing

⁵ No statistical measure was used to detect differences.

effects of IPV on other factors. Due to the high prevalence of violence among women in the world, assessing violence as either abused or not becomes inadequate, as women who experience a minor abusive act only once will be classified together with women with multiple episodes of various violence types. Given this situation, the frequency of abuse may well distinguish women and associated factors. Andersson, Ho-Foster *et al.* (2007) and Dunkle, Jewkes *et al.* (2004) noted the unavailability of a standard measure of violence severity. In order to address this gap, a variable called severe violence, which considers multiple episodes of violence reported by a respondent, was derived. For the logistic regression methods in Paper II, severe violence was constructed out of the question that asked frequency of violence. Severe violence was calculated by adding up all the affirmative responses to each of the nine questions (physical=6 and sexual=3) and their frequencies (each question had once, twice and thrice plus). The maximum possible number of episodes of violence experienced was therefore 27. The range of episodes reported by our respondents was 0-22. The effect of different binary ranges was assessed. A binary variable was constructed with 0-5 episodes representing low violence and compared it to 6 or more episodes of violence in the analysis which had the best fit model and lowest log likelihood.

For Paper III the variable severe violence after HIV disclosure was constructed by adding all the acts of violence a respondent answered affirmatively to each of the 13 IPV questions (physical=6 questions, emotional = 4 questions and sexual = 3 questions). Each respondent had therefore a possible 13 episodes of violence to report. Our variable severe violence had therefore 4 levels- no violence, one episode of violence, two episodes and lastly three/more episodes. A multiple ordered logistic regression model was constructed to assess factors associated with severe IPV after HIV disclosure. This helped to compare differential effects of low frequency (fewer

events/types of violence) versus high frequency (more types of violence). The association between HIV infection and negative reactions by partners after disclosure was found in a multiple regression model with partners' reactions as a dependant variable, whilst controlling for past violence and socio-demographic factors (age, education, marital status).

In both papers multivariate logistic regression models were developed to assess associations between IPV and various factors including socio-demographic, HIV, gender equity, past abuse experiences, and sexual risk behaviours. The choice of variables for risk factor analysis was based on previous theoretical studies (Jewkes 2010) especially the ecological basis of risk factors (Heise 1998), and the qualitative research with women and midwives about local patterns and meanings of sexuality and violence in intimate partnerships. Candidate variables for the multiple regression model were first assessed through bivariate analysis. Those variables which were significantly associated with IPV at the 10% level were considered for the multiple regression model. Backward stepwise regression analysis was used by fitting candidate variables in different stages. Socio-demographic variables were fitted in the first stage and those variables which were not significant at the 10% level were removed, starting with one with the highest p-value, until a best fitted model with the lowest logistic regression model was achieved with the remaining significant variables. These factors were reported in the findings (Paper II and III). The models adjusted for known covariates and other variables that could lead to bias if they were not controlled, such as women's age, education, time of interview, time of testing for HIV, interviewers and past experience of violence.

Chapter Four

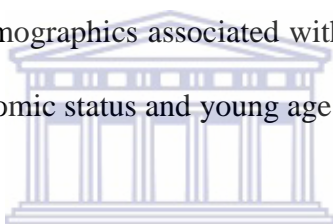
FINDINGS

4.1 Summary of findings

The major objective of the study was to assess the association between IPV and HIV during pregnancy. It estimated the prevalence of IPV during pregnancy and after disclosure of HIV status, and assessed factors associated with reporting IPV during pregnancy and after testing HIV positive. The study contextualized IPV during pregnancy in Africa by first reviewing literature and conducting meta-analysis of prevalence of IPV during pregnancy and risk factors for IPV in African studies. The study also explored pregnant women's experiences of IPV during pregnancy and how IPV is perceived by health workers including how midwives respond to abused women during their contact with them in antenatal care. The study was done through a three phased mixed-methods research programme which involved conducting a systematic review and meta-analysis of African studies on IPV, a qualitative study of pregnant and postnatal women and midwives in antenatal care, and lastly a cross sectional survey of 2042 postnatal women in Harare, Zimbabwe.

Results from the systematic review show that of the 19 studies found on IPV during pregnancy in Africa, 13 reported prevalence of physical, sexual and emotional IPV during pregnancy and this ranges from 2% to 57% (n = 13 studies) with meta-analysis yielding an overall prevalence of 15.23% (95% CI: 14.38 to 16.08%). Some of the dynamics reported in the study include that prevalence during pregnancy was lower than IPV in the last 12 months in four studies that had data on during and before pregnancy. Ten studies reported collecting various information on HIV status from respondents including HIV test results, of which five studies assessed the relationship

between HIV and IPV, after adjusting for known confounders and covariates. These studies showed significant associations between HIV and IPV during pregnancy, with odd ratios ranging between 1.48 and 3.10. Seven studies showed strong associations between IPV during pregnancy and a history of violence measured by ever experiencing child abuse, forced first sexual abuse and experiencing violence in the last 12 months. Five studies reported associations between a woman's and a partner's alcohol abuse and experiences of IPV (OR 2.89–11.60). Of these five, strong associations were observed between a partner's alcohol abuse and two associations showed a woman's increased chances of being abused during pregnancy if they used alcohol. Both partner's and woman's risky sexual behaviours were associated with experiencing IPV during pregnancy. Socio-demographics associated with experiencing IPV during pregnancy include woman's low socio-economic status and young age.



Results from the cross sectional survey (N=2042) show that 63.1% respondents reported at least one occurrence of physical, sexual and/or emotional violence during pregnancy, 44% reported emotional abuse, 38.9% reported sexual violence, 15.9% physical violence, 46.2% physical and/or sexual violence. Nearly a third of the women (30.2%) reported high frequency of sexual violence (three or more episodes) while one in ten (10.1%) reported six or more episodes of physical and/or sexual violence during pregnancy.

We sought to measure rates of disclosure of HIV test results to a partner. 95.5% disclosed their HIV test results to their partners. Overall HIV prevalence was 15.3 %, but the prevalence among women who did not disclose was more than double (35.2%, 95% CI 25.0-45.4) the rate among women who disclosed to their partners (14.3%, 95% CI 12.6-15.8). At least 3.5% of women who tested negative did not disclose, but 10.7% of those testing positive did not disclose. Some

40.5% of HIV positive women reported physical, sexual and/or emotional IPV after disclosure, compared to 31.5% of women disclosing HIV negative results. Factors associated with experiencing IPV and severe IPV during pregnancy and severe IPV after disclosing HIV status include young age, experiences of past violence (child abuse, forced first sexual intercourse, last 12 months abuse), gender inequalities (women endorsing sexual abuse, wife beating and partner controlling behaviours), quarrelling behaviour, heavy alcohol abuse, partner's use of violence in the community, absence of social support, sexual risk factors (multiple sexual partnerships, testing positive to STI), and partner knowing own HIV status. Stronger associations were observed with severe IPV compared to IPV in general. Qualitative results show that women faced many challenges after HIV disclosure including their partner's refusal to test for HIV or to disclose their results and yet perpetrated coerced sex to their partners. Respondents in FGDs reported that some men intentionally attempt to infect their partners after women tested HIV negative. This finding supports the quantitative finding that a greater proportion of respondents who tested HIV negative also reported being abused by their partners.

Information from in-depth interviews with health providers validated women's accounts of sexual and emotional violence being common, while reports of physical violence were rare during pregnancy and after HIV disclosure. Respondents in the focus group discussions reported that the church, health system and the extended family contributed to their abuse during pregnancy through various ways in which they emphasised women's subordination to their partners. Male partner's lack of or not wanting to understand the physical, sexual and emotional changes that faced women due to the pregnancy was another reason for conflicts and IPV during pregnancy and after HIV disclosure according to women in focus group discussions. Women reported that some of the abuse took place when the men were drunk.

The study also found that midwives were not knowledgeable, equipped and supported by the health system to recognise and address IPV in antenatal and postnatal care. Because midwives were not trained in gender-based-violence, they generally did not think IPV issues could be dealt with in their health care settings and reports of them unintentionally advising women to tolerate abuse were recorded. Opportunities to deal with violence in the health care system were lost when an unsustainable short term project led by a non-governmental organisation terminated its services without the health system supporting its continuity.

4.2 The organisation of the findings section

The following chapters present the full results in the five sections as manuscripts already published, in press or under review. (The papers are also presented at the end of the thesis as appendices). These five papers are referred to in the discussion by their Roman numerals (Paper I-V). Although the study was conducted starting with the systematic review, followed by the qualitative design and lastly the quantitative phase, the results are presented with the quantitative findings first. This arrangement of the results allows for better interpretation of the quantitative findings. All papers are included and reprinted with the copyright holders' permission. The references for each manuscript are included in the overall bibliography of the thesis. The manuscripts as published, accepted or submitted are included in the appendixes, with permission, with the references for each manuscript included in the manuscript. The discussion follows after the presentation of the papers.

4.3 List of PhD manuscripts

Paper I: Shamu S, Abrahams N, Temmerman M, Musekiwa A, Zarowsky C (2011) A Systematic Review of African Studies on Intimate Partner Violence against Pregnant Women: Prevalence and Risk Factors. PLoS ONE 6(3): e17591. doi:10.1371/journal.pone.0017591

Paper II: Shamu S, Zarowsky C, Shefer T, Abrahams N, Temmerman M. (2013). Intimate partner violence during pregnancy in Zimbabwe: A Cross-sectional study of prevalence, predictors, and associations with HIV. Tropical Medicine and International Health doi:10.1111/tmi.12078

Paper III: Shamu S, Zarowsky C, Shefer T, Temmerman M, Abrahams N. Intimate Partner Violence (IPV) after disclosure of HIV test results among pregnant women in Harare, Zimbabwe. Submitted to WHO Bulletin on 10 November 2012

Paper IV: Shamu S, Abrahams N, Temmerman M, Shefer T, Zarowsky C (2012) “That Pregnancy can Bring Noise into the Family”: Exploring Intimate Partner Sexual Violence during Pregnancy in the Context of HIV in Zimbabwe. PLoS ONE 7(8): e43148. doi:10.1371/journal.pone.0043148

Paper V: Shamu S, Abrahams N, Temmerman M, Zarowsky C. (2013). Exploring opportunities and obstacles to screening pregnant women for intimate partner violence during antenatal care in Zimbabwe. Culture, Health and Sexuality. <http://dx.doi.org/10.1080/13691058.2012.759393>

Chapter Five

PAPER I: A SYSTEMATIC REVIEW OF AFRICAN STUDIES ON INTIMATE PARTNER VIOLENCE AGAINST PREGNANT WOMEN: PREVALENCE AND RISK FACTORS

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Abstract

Background

Intimate partner violence (IPV) is very high in Africa. However, information obtained from the increasing number of African studies on IPV among pregnant women has not been scientifically analysed. This paper presents a systematic review summing up the evidence from African studies on IPV prevalence and risk factors among pregnant women.

Methods

A key-word defined search of various electronic databases, specific journals and reference lists on IPV prevalence and risk factors during pregnancy resulted in 19 peer-reviewed journal articles which matched our inclusion criteria. Quantitative articles about pregnant women from Africa published in English between 2000 and 2010 were reviewed. At least two reviewers assessed each paper for quality and content. We conducted meta-analysis of prevalence data and reported odds ratios of risk factors.

Results

The prevalence of IPV during pregnancy ranges from 2% to 57% (n=13 studies) with meta-analysis yielding an overall prevalence of 15.23% (95% CI: 14.38 to 16.08%). After adjustment for known confounders, five studies retained significant associations between HIV and IPV during pregnancy (OR1.48-3.10). Five studies demonstrated strong evidence that a history of violence is significantly associated with IPV in pregnancy and alcohol abuse by a partner also increases a woman's chances of being abused during pregnancy (OR 2.89-11.60). Other risk factors include risky sexual behaviours, low socio-economic status and young age.

Conclusion

The prevalence of IPV among pregnant women in Africa is one of the highest reported globally. The major risk factors included HIV infection, history of violence and alcohol and drug use. This

evidence points to the importance of further research to both better understand IPV during pregnancy and feed into interventions in reproductive health services, to prevent and minimize the impact of such violence.

Keywords: intimate partner violence, pregnant women, prevalence, risk factors, HIV, Africa



Introduction

Women of reproductive age are more vulnerable to abuse by intimate partners than by any other perpetrator (Fonck, Els *et al.* 2005). Prevalence of Intimate Partner Violence (IPV) against pregnant women differs across populations globally with rates reported to range from 0.9 to 20.1% in a systematic review that included 13 studies conducted before 1996 (Gazmararian, Lazorick *et al.* 1996) . A second review of 18 studies reported the prevalence of physical violence against pregnant women ranging between 0.9% and 30% (Taillieu and Brownridge 2010). Only six studies were from developing countries (reporting a range from 1.3% to 12.6%) in which only one was from Africa. While it may be argued that with the passage of time, more defined and comprehensive measures were used to measure violence more accurately and with greater disclosure, very broad prevalence ranges persist as reflected in the 2010 review compared to the 1996 review (Gazmararian, Lazorick *et al.* 1996). The low rates of violence reported in studies from developing countries in the 2010 review cannot be interpreted without special focus on context and risk factors and that further inquiry focusing on Africa in particular is needed. In addition, both reviews did not cover all African databases, journals and archives and these findings cannot be generalised to African populations given the socio-cultural, political, economic and gender power differences. More recent data from the World Health Organisation Multi-country study (WHO 2005) reported prevalence estimates of between 1% and 28% for the 10 participating countries with the highest prevalence reported in the two African countries: Ethiopia and Tanzania (Garcia-Moreno, Henrica *et al.* 2006).

There are significant negative maternal and child health outcomes associated with violence against pregnant women which are directly linked to Millennium Development Goals (MDGs) number 4 and 5 to reduce child mortality and improve maternal health as well as MDG 3 to

promote gender equality and empowerment of women (WHO 2000). These negative health outcomes include pregnancy loss, preterm labour, pregnancy complications, hypertension, delivering low birth weight, physical injuries and stress (Campbell 2002, WHO 2005). IPV has also been reported as a contributing cause of maternal deaths (Martin, Macy *et al.* 2007) and there is therefore need to synthesize information on risk factors from studies on abused pregnant women to quantify the problem and inform responses. Such information may help to advocate for health interventions such as screening pregnant women for IPV to contribute to safe motherhood and healthy babies.

Pregnant women are at a higher risk of experiencing gender-based-violence because they are more likely to be in relationships compared to non-pregnant population (Taillieu and Brownridge 2010). In addition, their age (15-49 years) has also been identified as a higher risk group for IPV. Analysing the evidence from studies on this population is critical for interventions since pregnancy-related services provide excellent opportunities to assess the extent to which women experience abuse by partners and grant opportunities to assist and support them – all which would contribute to the meeting of the MGDs.

Many of the risk factors for IPV during pregnancy have also been identified generally in IPV studies among women (Jewkes 2002). The socio-demographic risk factors reported by Taillieu and Brownridge (2010) included being young or adolescent; single marital status; separated or divorced during pregnancy; belonging to ethnic minorities and low educational status. For example, less education may translate to limited opportunities and increases economic vulnerability leading to some women being abused by partners who may be economically more powerful than them. Adolescents who are usually less mature to handle relationships or

marriages may also be economically vulnerable and at risk of submitting to male power and abuse. Other risk factors identified included increased substance and drug use (Stewart and Cecutti 1993, Taillieu and Brownridge 2010) as intoxication may lead to irresponsible behaviour such as violence. Perpetrator characteristics associated with IPV during pregnancy include male controlling behaviour and having economic power (Xu, Zhu *et al.* 2005, Bacchus, Mezey *et al.* 2006). In Africa, feminisation of poverty means that many poor women often rely on their partners for household maintenance and pregnancy care. Men exploit this economic vulnerability by abusing their partners. Pregnancy-related factors found to be associated with experiencing IPV during pregnancy include unintended pregnancy, late entry into care and inadequate antenatal care (Stewart and Cecutti 1993, Fanslow, Silva *et al.* 2008). Unintended and unplanned pregnancy is usually blamed on the female partner and could be punished by divorce or threats to divorce in some parts of Africa. Men fear responsibilities which come with a pregnancy and therefore less likely to sanction a pregnancy if they were not prepared for it (Valladares, Ellsberg *et al.* 2002). This is possibly due to male domination and control of female partners which starts upon marriage when the control of female sexuality is transferred from the father to the husband, which in many African traditional cultures is officialised by sending marriage payments (Chirawu 2006). The control of household income which usually rests with male partners, may influence late or inadequate prenatal entry. Abuse in childhood has been found to be associated with IPV among women in general (Beitchman, Zucker *et al.* 1992, Mullen, Martin *et al.* 1994, Messman and Long 1996) but information among pregnant women remains to be reviewed.

There are increasing studies from Africa that report on the relationship between HIV infection and IPV (Temmerman, Ndinya-Achola *et al.* 1995, Jewkes, Dunkle *et al.* 2006, Pronyk, Hargreaves *et al.* 2006, Townsend, Jewkes *et al.* 2010). In a review of literature on HIV and domestic violence, Kaye reported that violence against female partners increases when a female

partner is known to be HIV positive (Kaye 2004). Similarly, studies in Rwanda (Van der Straten, King *et al.* 1998), Tanzania (Maman, Mbwapbo *et al.* 2002), and Kenya (Fonck, Els *et al.* 2005) have shown associations between HIV and IPV in a non-pregnant population; however, a study in the USA had contrasting findings (Koenig, Whitaker *et al.* 2002). Potential ways in which HIV infection may be linked to IPV, based on studies mainly emerging from Africa include: physical vaginal trauma from forced sex; limited capability to negotiate safer sex due to partner violence or threat of it; violence following disclosure of a positive HIV result and perpetrators more likely to engage in risky sexual behaviour (WHO 2004).

Research Question

Despite the fact that violence against women is reported as amongst the highest and severest in Africa compared to other continents (WHO 2004, WHO 2005), evidence from a recent systematic review on domestic violence, which excluded studies among pregnant women, showed that relatively few studies and publications emerged from Africa compared to North America and Europe (Alhabib, Nur *et al.* 2009). Among the 134 studies reviewed, only 11% were conducted in Africa. Given the high prevalence of IPV in Africa and the increasing number of good scientific enquiry on violence against pregnant women in Africa, a systematic analysis would help to inform both research and action on the continent. The evidence from a systematic review could be used for the development of policies for prevention of IPV, advocacy programmes for IPV in general and during pregnancy. At a service level, it could influence health workers to screen pregnant women for IPV and lead to effective referrals and interventions.

Purpose of the review

The aim of this systematic review was to systematically sum up the evidence from original empirical research conducted in Africa on prevalence and risk factors for IPV among pregnant women. The review also assesses the quality of the studies on IPV.

Methods

Search strategy

Searching of electronic databases using ebscohost was the primary way for obtaining peer reviewed journal articles in this review. A search of the Medline, Google scholar, Pubmed, SocIndex, Academic Search Premier, Family and Society Studies Worldwide, PsycArticles, Women's Studies International, Africa Wide Information databases was conducted to obtain articles on violence during the time of pregnancy. The search, which was conducted until January 2010, was restricted to articles published between January 2000 and January 2010 in all databases and journals searched. This period was chosen because studies only emerged from Africa from late 1990's and no systematic review for this continent has been conducted. Separate searches were conducted using the following key words: IPV, gender-based-violence, violence against women, pregnant women, spousal violence, domestic violence, wife beating, wife abuse, spousal abuse, violence in pregnancy, violence and antenatal care, Africa, prevalence, risk factors, associations. Reference lists of the articles being reviewed were checked and relevant articles included. An independent hand search was conducted on specific African journals. The full text of some articles that only showed abstracts in the electronic databases or journals searched, were obtained by emailing authors of the papers. The articles were checked for duplications in the different databases searched.

Eligibility criteria

The eligibility criteria were: studies published between January 2000 and January 2010; articles based on original quantitative research results and conducted in any African country using any of the following study designs: cross sectional, cohort, case control, randomised controlled trial; articles published in English; all studies had to be peer reviewed in academic journals; studies had to include pregnant women (or mothers attending postnatal care within two months of giving birth); the women had to be the primary source of information and lastly articles had to focus on prevalence of IPV (physical, sexual and emotional) and/or risk factors for IPV among pregnant abused women. Intimate partners included past and current spouses, boyfriends, fiancées, whether married, cohabiting or dating. From all the studies that were included for systematic review, only those that reported overall prevalence of IPV were included in meta-analysis.

Data collection process

Using a specially designed data extraction form, two reviewers independently extracted information from the papers. Data items included country, study design, sample size, response rate, target population, sampling method, tools used, case definition, interview type and outcomes from each study. Papers were examined to ensure that they do not display the same data set in different papers. If two articles were from the same data set but reporting on different variables, both articles were considered. Where there was conflict in scoring between the reviewers, consensus was reached by three reviewers. Study authors were contacted in the case of unclear or missing data.

Quality of studies and risk of bias

In order to assess the quality of studies and risk of bias, criteria developed by Alhabib, Nur *et al.* (2009) was adapted and applied. The following criteria was used: 1) Specification of the target

population; 2) use of adequate sampling methods (e.g. random sampling); 3) adequate sample size (at least 300 participants); 4) adequate response rate ($\geq 80\%$); 5) measurement with valid, tested instrument [e.g. Conflict Tactics Scale 2 (CTS2) (Straus, Hamby *et al.* 1996), Abuse Assessment Screen (AAS)] (McFarlane, Parker *et al.* 1992); 6) reporting confidence intervals or standard errors; 7) reported attempt to reduce observer or other forms of bias; 8) adjusted for confounding variables. Reviewers categorized instruments into CTS, AAS, the WHO (2005) questionnaire for measuring domestic violence against women and lastly “own tool” where no known instrument was used. Where no values were provided in non-statistically significant relationships, we stated that the relationship was not statistically significant and that the *p*-value was not provided.



Data analysis

There were two stages of data analysis. Firstly, for the analysis of prevalence of IPV, we conducted a fixed effect meta-analysis using STATA 11 (StataCorp2 2009) statistical software and results were presented using forest plots with prevalence and 95% confidence intervals. Heterogeneity between studies was assessed by using the I-square statistic (Higgins 2003) and by visually examining the forest plot for overlapping confidence intervals. As this revealed substantial heterogeneity, we decided not to use the pooled result from meta-analysis (except for the overall IPV during pregnancy) and results were described qualitatively. Secondly, the analysis of risk factors for IPV involved tabulating and describing odds ratios or risk ratios with associated 95% confidence intervals and *p*-values. Meta-analysis of risk factors was not possible because the majority of the studies did not report sufficient data for meta-analysis to be performed.

Results

Description of studies: design, setting and population

A total of 131 abstracts were identified (see Appendix 1). After screening the abstracts, 95 were excluded for not primarily focusing on Africa; research not original and absence of either risk factors or prevalence. A further screening of the remaining 36 papers resulted in further exclusion of another 17 papers because the estimates were not focusing on IPV during pregnancy. Nineteen papers were finally reviewed (see Table 1). Sixteen out of 19 studies employed interviewer administered questionnaires; two used a self-administered questionnaire while in one study it was not clear how the instrument was administered. Seventeen studies were cross sectional and two used a cohort design. Seventeen were conducted in urban areas while two studies included recruitment from rural areas. Seventeen studies were conducted in a hospital/clinic setting with the majority of women visiting during the antenatal period (14 studies), two studies were conducted in the labour wards, two at the women's own homes and two among women attending postnatal care clinics (some studies recruited from more than one settings).

Quality of studies and risk of bias

Table 2 shows the quality score ranking of studies. The majority (13 or 68%) of studies scored at least five out of the possible eight points while three (15.7%) studies scored less than half the possible scores and four (21%) scored half. Two quality measurements that had the least scores (scored less than half) were use of adequate sampling methods and use of validated instruments. The sample sizes in the studies reviewed ranged from 178 to 1395 participants and seventeen out of 19 studies interviewed between 178 and 612 participants. The total number of participants in this review was 8729. [NB: Two papers (Dunkle, Jewkes *et al.* 2004, Dunkle, Jewkes *et al.*

2004a) reported from one data set and only the larger sample size was included here]. Eleven out of 19 studies (58%) reported a response rate of at least 80% (eight studies did not report response rates).

Forty-two percent of the studies employed some form of random or systematic sampling, while the rest employed non-random sampling methods. Most (58%) studies used “own” questionnaires, while 42% employed commonly used and validated instruments such as the AAS (three studies), WHO questionnaire (four studies) and CTS2 (one study). Fourteen studies reported confidence intervals or standard errors in their analysis of data, while five presented frequencies only. Ten studies adjusted for different known confounders in their data analysis.



Prevalence of Intimate Partner Violence in the past 12 months

Four studies reported an overall prevalence of IPV before pregnancy or in the last 12 months. The lowest prevalence reported in these studies was 14.2%, while the highest prevalence was 43.4%. The prevalence of physical violence in the past 12 months was reported in four studies and ranged from 14% to 41%. See Table 1.

Prevalence of Intimate Partner Violence during pregnancy

The overall IPV prevalence during pregnancy was reported in 13 studies (see Table 1). The prevalence ranged from 2.3% to 57.1%. Meta-analysis yielded an overall prevalence of 15.23% (95% CI: 14.38 to 16.08%). See Figure 1 for Forest Plot of Overall IPV Prevalence. There was high heterogeneity between studies (I-squared = 99.1%; p -value < 0.001). Most (9) of the studies reported prevalence between 27.7% and 51.1%, while seven reported prevalence between 27.7% and 35%. Sexual violence in the six studies in which this data was clearly presented had a

prevalence range of 2.7%-26.5%. Physical violence was reported in four studies and ranged from 22.5% to 40%. Emotional violence was recorded in three studies (24.8%; 41% and 49%).

Risk Factors for Intimate Partner Violence

Low level of education: Only three studies reported strong positive associations between a woman's low level of education and experiencing IPV, that is, Fawole, Hunyinbo *et al.* (2008) (OR 12.54), Hoque and Kader (2009) (OR 7.59) and Umeora, Dimejesi *et al.* (2008) ($p=0.001$, OR not stated), while in six studies, the relationship did not reach statistical significance ($p=0.31$ in (Ezechi, Kalu *et al.* 2004, Ezechi, Gab-Okafor *et al.* 2009); $p=0.145$ in Kaye, Bantebya *et al.* (2002); $p=0.05$ in Efetie and Salami (2007); p value was not stated in Olagbuji, Ezeanochie *et al.* (2010) and Ntaganira, Muula *et al.* (2008).

Low socio-economic status: In the Hoque and Kader (2009) study, it was noted that being unemployed was a risk factor for experiencing abuse (OR 3.57; 95% CI 1.83 - 6.98) and so was belonging to a low socio-economic class in studies conducted by Ezechi, Gab-Okafor *et al.* (2009) ($p = 0.000$) and Umeora, Dimejesi *et al.* (2008) ($p=0.0037$) and having less household decision-making power ($p= 0.009$) in Kaye, Bantebya *et al.* (2002), Kaye, Mirembe *et al.* 2006). There was no difference in the experience of abuse between women who were unemployed and those who were employed in either skilled or informal sector ($p=0.701$) in Kaye, Bantebya *et al.* (2002).

Young age: Five studies reported on the relationship between age and experiences of abuse among pregnant women, with three studies reporting significant associations (Kaye, Bantebya *et al.* 2002, Fawole, Hunyinbo *et al.* 2008, Ntaganira, Muula *et al.* 2008) and two reporting no

associations ($p=0.45$ in Ezechi, Kalu *et al.* (2004), and $p=0.11$ in Ezechi, Gab-Okafor *et al.* (2009). Younger age such as being an adolescent compared to non-adolescent (over 20 years) were found to be associated with abuse ($p=0.000$) in Kaye, Bantebya *et al.* (2002) and Fawole, Hunyinbo *et al.* (2008) while in Ntaganira, Muula *et al.* (2008) being a young adult (26-34 years) was associated with experiencing abuse compared to those aged between 18 and 25 years (OR 1.35).

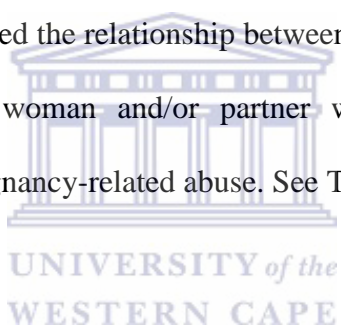
HIV Diagnosis: Of the 19 studies reviewed, 10 (52.6%) collected data on HIV prevalence or knowledge of serostatus among pregnant women. Table 3 shows the relationship between HIV and IPV. After the adjustment for known confounders, five studies retained a positive association between HIV and IPV during pregnancy. These studies showed that being diagnosed for HIV or testing HIV positive, increases pregnant women's chances of being abused by a partner. The increase in the likelihood of a HIV infection ranged from a minimum OR of 1.48 to a maximum OR of 3.1. Three studies did not find a significant association and two did not test/report findings on relationship between IPV and HIV.

Sexual Risk factors: In multiple variable logistic regression models, sexual risk factors positively associated with experiencing IPV include transactional sex and having more than 5 lifetime sexual partners (OR 1.69; 95% CI 1.21–2.37) (Dunkle, Jewkes *et al.* 2004); having a partner with multiple sexual partners (OR 1.53; 95% CI 1.15- 2.20 and OR 3.2; 95% CI 2.0–5.0) in (Ntaganira, Muula *et al.* 2008) and Karamagi, Tumwine *et al.* (2006) studies respectively and having sex with another man, while in marriage (OR 2.8; 95% CI 1.0-7.7) in Karamagi *et al.*'s study (Karamagi, Tumwine *et al.* 2006). However, condom use by a partner was not significantly

(OR 1.2, 95% CI 0.7–2.3) associated with IPV (Karamagi, Tumwine *et al.* 2006) (data not shown).

History of violence: There is strong evidence from seven studies that a history of abuse (defined as experiencing abuse before the age of 15, abuse in the past 12 months and abuse in lifetime) is significantly associated with IPV in pregnancy or just before pregnancy as shown on Table 4. Of these studies, only three showed observed statistical differences between the history of violence and current violence during pregnancy ($p \leq 0.023$) but did not show risk or odds ratios.

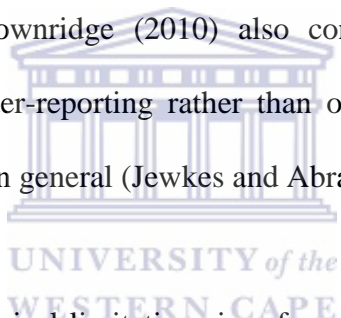
Alcohol use: Five studies examined the relationship between alcohol use and IPV and all of them found that alcohol use by a woman and/or partner whether heavily or occasionally is significantly associated with pregnancy-related abuse. See Table 5.



Discussion

The review found a wide range in the overall prevalence of IPV during pregnancy ranging from as low as 2% to as high as 57%. This wide range is somewhat similar to what was reported in Gazmararian, Lazorick *et al.* (1996)'s review (0.9-20%) and Taillieu and Brownridge (2010) review (0.9-30%). Similarly, the WHO (2005) Multi-country study that collected data from 10 countries reported IPV prevalence during at least one pregnancy ranging from 1% to 28%. The disparities in our review may be explained in two ways. Firstly this could be attributed to methodological differences across studies. The lower prevalence in some studies is very likely due to methodological limitations. For instance Fawole, Hunyinbo *et al.* (2008)'s study which reported the lowest rate (2.3%) excluded women who if included, could have contributed to a higher and more accurate prevalence. The authors mentioned that, "Women who expressed fear

that granting the interviews may result in further violence were excluded from the interviews” (Fawole, Hunyinbo *et al.* 2008) Although the number of women excluded for this reason was not mentioned, it clearly shows that the excluded women resulted in underreporting and lower estimates. In addition, the study used its own tool with few semi-structured questions. The author’s non-reporting of response rate was another limitation of the paper. It was this outlier during meta-analysis that contributed the most weighting (45%) (Figure 1) leading to higher heterogeneity. Other studies which reported lower prevalence (8.3%, 11.6%), used own tools or AAS in the case of Chandisarewa, Stranix-Chibanda *et al.* (2007) and Gyuse and Ushie (2009) respectively or tools with few items measuring violence (13.6%) in the case of Umeora, Dimejesi *et al.* (2008). Taillieu and Brownridge (2010) also concluded that methodological issues influenced disclosure. Such under-reporting rather than over-reporting has been identified in violence against women studies in general (Jewkes and Abrahams 2002).



Secondly, despite the methodological limitations in a few studies, the great disparities could be showing real differences in levels of occurrences of violent acts in African regions and cultural groups. The fact that most of the studies (9 out of 13) show prevalence above 27% means that the prevalence of violence during pregnancy is very high in Africa. This is similar to trends of violence among women in the general population in Africa (Garcia-Moreno, Henrica *et al.* 2006). Such high prevalence could be a result of gender inequalities organised mostly around patriarchal lines in Africa (Seedat, Ashley Van *et al.* 2009). However, qualitative studies are needed to explore such dynamics and disparities in prevalence figures in general and among pregnant women. Another possible explanation for the higher levels could be related to greater reporting of violence due to increased use of tested instruments. This was a recommendation

from Gazmararian, Lazorick *et al.* (1996) that the use of validated instruments could result in more disclosure of violence.

Since most of the studies on violence against women are cross sectional in design, there is a dearth of literature on violence trends before pregnancy, during pregnancy trimesters and after pregnancy. There is some evidence in this review that violence decreases during pregnancy by at least 10%. Only four studies measured prevalence of violence both before and during pregnancy. Three of these studies show that prevalence of violence during pregnancy was lower than violence in the past 12 months or before pregnancy. Olagbuji, Ezeanochie *et al.* (2010) reported 43.4% and 28.3% before and during pregnancy respectively, while Fawole, Hunyinbo *et al.* (2008) reported 14.2% and 2.3% before and during pregnancy respectively and Ezechi, Kalu *et al.* (2004) reported 39.1% and 28.7% before and during pregnancy respectively (Table 1). The same trend has been observed in other parts of the world (Stewart and Cecutti 1993, Roelens, Verstraelen *et al.* 2008). This possibly shows the protective effect of pregnancy against IPV and requires further exploration to understand the socio-cultural factors that influence the decrease of abuse during pregnancy.

The absence of data on the association between HIV testing and abuse during pregnancy meant that conclusions could not be drawn. Only one study (Ezechi, Gab-Okafor *et al.* 2009) demonstrated that; before testing for HIV the prevalence of IPV was 17% and after testing for HIV and disclosing their status 62.7% reported being abused by their partners. Chandisarewa, Stranix-Chibanda *et al.* (2007) showed that 8% were abused after testing for HIV but did not give a baseline figure to show the proportion of pregnant women who were abused before HIV test. A larger cohort study will be needed to observe trends in IPV before and after HIV testing

in a pregnant population to understand the effect of disclosure of HIV status on IPV. Such research is crucial for the development of health services interventions such as screening for IPV during HIV testing during pregnancy and providing support to pregnant women.

This review has shown that HIV diagnosis and seropositivity are positively associated with experiencing IPV during pregnancy. This was found in five studies and reflects what has been reported in the general population as well (Maman, Mbwambo *et al.* 2002, Jewkes, Dunkle *et al.* 2006). Evidence of the interconnections between HIV and IPV has been demonstrated by the IMAGE study (Pronyk, Kim *et al.* 2008) and Stepping Stones study (Jewkes, Nduna *et al.* 2008) in South Africa where interventions in gender and IPV training reduced HIV sexual risk factors. This association with HIV status could be related to the increase in HIV screening which is almost becoming universal among pregnant women through the provider initiated HIV testing in most countries. All countries in which the studies in this review were conducted, are in the sub-Saharan region which records the highest prevalence of HIV in the world, among women of child-bearing age (WHO/UNAIDS 2008). We need to understand how HIV status operates in a culture where female subordination is the norm and how together with other factors, it increases pregnant women's risk for violence.

It is clear from the study that the abuse of alcohol or drugs by partner (or self) is a risk factor for being abused by a partner. Results in this review are consistent with results across the world (Taillieu and Brownridge 2010) in that alcohol and drug abuse are significantly associated with partner violence. The higher odds ratios obtained in the studies reviewed on the relationship between alcohol or drug use and IPV could have been influenced by how the instruments were used to measure alcohol use. For example, in a study by Olagbuji, Ezeanochie *et al.* (2010)

which reported the highest odds ratios (OR 11.60; 95% CI 3.8–35.1) the question on alcohol abuse was too general; researchers asked if the respondent had taken “one or more alcoholic drinks per month in the last 3 months” and this was coded regular alcohol use if a respondent answered affirmatively. This overestimated the strength of the relationship with partner violence. While Ntaganira, Muula *et al.* (2008) and Ntaganira, Muula *et al.* (2009) asked if a respondent’s partner used alcohol sometimes, frequently/always or never, Dunkle, Jewkes *et al.* (2004) asked if a respondent ever had a fight, accident, injury, casual sex, or got arrested after drinking, to assess problem drinking. While all the other studies assessed either frequency or effects of alcohol intake, Fawole, Hunyinbo *et al.* (2008) only assessed whether partner or respondent took alcohol or not. This raises issues of measurement bias since alcohol intake was not clearly defined; respondents taking one drink were similarly considered with those who drank to intoxication and therefore possibly exaggerating the magnitude of association with IPV. There is need to use validated measures of alcohol abuse to avoid overestimating the strength of the relationship.

The review showed a strong relationship between a history of violence and current violence in pregnancy although the range and types of violence varied including child abuse and previous year experience of violence among pregnant women. Reviews elsewhere demonstrated that adult women (though not pregnant) with a history of childhood sexual abuse show stronger evidence of re-victimisation than non-abused women (Beitchman, Zucker *et al.* 1992, Mullen, Martin *et al.* 1994, Messman and Long 1996). One explanation put forward is that when women are abused in childhood, they learn that subordination to males and experiencing violence are part of being a woman. They become vulnerable and therefore depend on men (Messman and Long 1996). This may hold true in the context of IPV during pregnancy when women are less able to

economically protect themselves. Being younger and having a low socio-economic status compared to their partners, may also contribute to them being abused by their partners who are older and have economic power and security. Since low socio-economic status is linked with being abused, it would therefore imply that raising women's income levels through access to and control of economic and financial resources could significantly lower their chances of being abused. In the IMAGE study in South Africa women who were economically empowered through credit extension and managing loans reported reduced risk of IPV (Pronyk, Kim *et al.* 2008).

Strengths and weaknesses

Most of the studies scored above average on the study quality score. The quality of the studies was increased by the fact that most controlled for confounding variables in the multivariate logistic analysis. However, sample sizes in the studies were generally low and the use of standardized and validated instruments was low. The review did not look at clinical outcomes of abused women during pregnancy. Such an analysis of clinical outcomes could help to further influence policies on screening and other interventions at the health system level. An analysis of some questions of violence in studies which used own tools shows some resemblance of the McFarlane, Parker *et al.* (1992) Abuse Assessment Screen (AAS) which over the years has influenced clinical assessments and research in gynaecological settings despite its limitations such as its short length, combined items for measuring physical and sexual violence, non-availability of any measure of emotional violence and its use of words such as "abuse" in asking violence questions instead of behavioural acts such as used in the WHO (2005) questionnaire and the Conflict Tactics Scale 2 (CTS2) (Straus, Hamby *et al.* 1996). The comparison between the

AAS and the CTS2 has been done elsewhere (Reichenheim and Moraes 2004) and results show less reliability in the AAS.

Conclusion

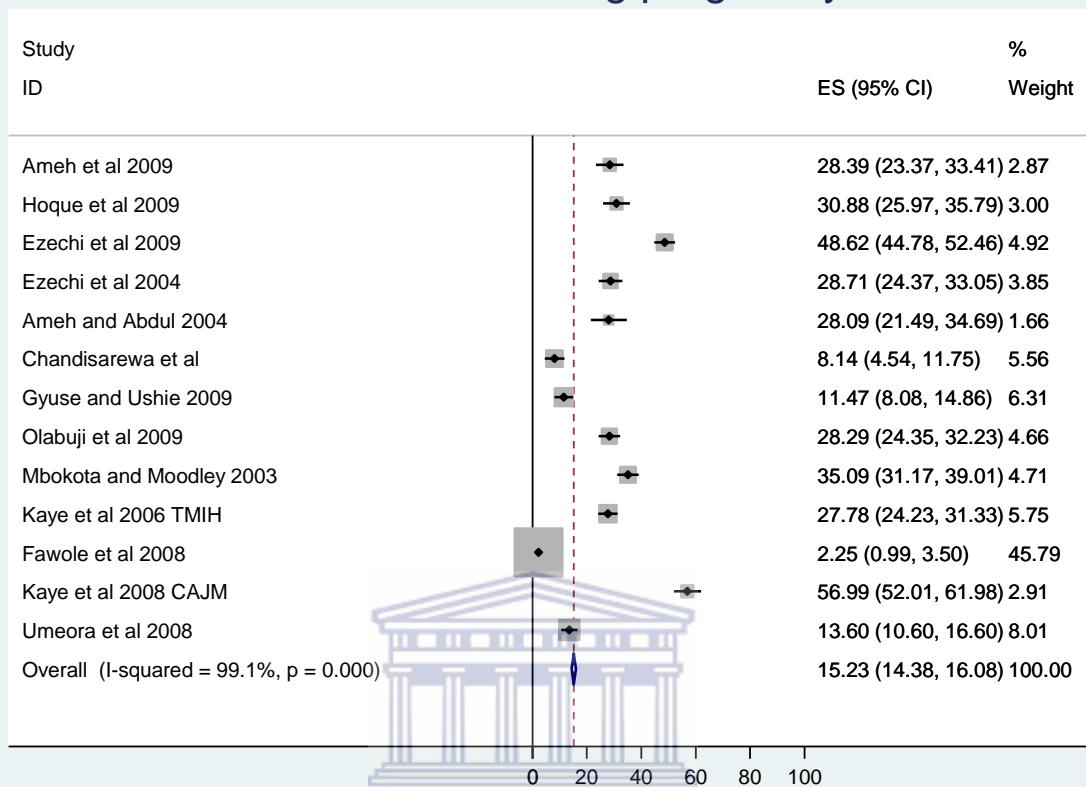
This review contributes knowledge of prevalence of and risk factors for IPV during pregnancy in Africa and shows clear evidence that the prevalence of IPV is very high in pregnant women on the continent. The major risk factors for IPV are alcohol and drug use, sexual risk taking, HIV infection and a history of violence and points to the need for interventions with pregnant women as part of antenatal care. Such screening and programs should address both prevention of IPV and HIV since it essentially deals with similar women empowerment issues.

Acknowledgements



We would like to thank colleagues at the School of Public Health of the University of the Western Cape and participants of the International AIDS Conference 2010 in Vienna, Austria for their useful comments.

Overall: IPV during pregnancy



Appendix 1: Forest plot showing meta-analysis of overall IPV prevalence

Table 1: Studies reviewed, variables and measurements.

| Variables | Amech, Shittu <i>et al.</i> (2009) | Hoque, Kader <i>et al.</i> (2009) | Ezechi, Gab-Okafor <i>et al.</i> (2009) | Ezechi, Kalu <i>et al.</i> (2004) | Amech Abdul (2004) | Chandisarewa Stramix- <i>et al.</i> (2004) | Dunkle Jewkes <i>et al.</i> (2004) | Dunkle Jewkes <i>et al.</i> (2004a) | Karamagi, Tumwine <i>et al.</i> (2006) | Ntaganira, Muula <i>et al.</i> (2009) | Ntaganira, Muula <i>et al.</i> (2008) | Gyuse and Ushie (2009) | Olagbuji, Ezeanochie <i>et al.</i> (2010) | Mbokota and Moodley (2003) | Kaye, Mirembe <i>et al.</i> (2006) | Fawole, Hunyibo <i>et al.</i> (2008) | Kaye, Bantebya <i>et al.</i> (2002) | Umeora, Dimejesi <i>et al.</i> (2007) | Efete Salami (2007) |
|---|------------------------------------|-----------------------------------|---|-----------------------------------|--------------------|--|------------------------------------|-------------------------------------|--|---------------------------------------|---------------------------------------|------------------------|---|----------------------------|------------------------------------|--------------------------------------|-------------------------------------|---------------------------------------|---------------------|
| Country | Nigeria | South Africa | Nigeria | Nigeria | Nigeria | Zimbabwe | South Africa | South Africa | Uganda | Rwanda | Rwanda | Nigeria | Nigeria | South Africa | Uganda | Nigeria | Uganda | Nigeria | Nigeria |
| Design | CS | CS | CS | CS | CS | CS | CS | CS | CS | CS | CS | CS | CS | CH | CH | CS | CS | CS | CS |
| Sample | 310 | 340 | 652 | 418 | 178 | 221 | 1366 | 1395 | 457 | 387 | 600 | 340 | 502 | 570 | 612 | 534 | 379 | 500 | 334 |
| Response rate | - | 94% | 95.5% | 80% | 65.9% | - | 93.1% | 95.1% | 96% | - | 100% | - | - | 94.3% | 88% | - | - | - | 83.5% |
| Target ppln described? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Sampling | NR | R | NR | - | NR | - | R | R | R | R | NR | NR | - | NR | NR | R | N/R | R | R |
| Tools used | own | Own | WHO | own | own | own | WHO | WHO | own | own | CTS | AAS | WHO | own | AAS | own | AAS | own | own |
| Case defined | Y | N | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| CI/std errors | N | Y | Y | N | N | N | Y | Y | Y | Y | Y | N | Y | N | Y | Y | N | Y | N |
| Interview type | intvr | Intvr | Self | self | intvr | intvr | intvr | intvr | intvr | intvr | intvr | - | intvr | intvr | intvr | intvr | intvr | intvr | intvr |
| adjustment | N | N | Y | N | N | N | Y | Y | Y | Y | Y | N | Y | N | Y | Y | N | Y | N |
| Assessed HIV? | N | Y | Y | N | N | Y | Y | Y | Y | Y | Y | N | Y | N | Y | N | N | N | N |
| ¶Overall IPV past 12 months (before pregnancy)* | - | - | (17% before HIV test) | (39.1%)* | - | - | - | 30.1% | - | - | - | - | (43.4%)* | - | - | (14.2%)* | - | - | - |
| sexual | - | - | - | - | - | - | - | 9.7% | 65% | - | - | - | - | - | - | - | - | - | - |
| physical | - | - | - | - | - | - | - | 25.5% | 14% | - | 35.1% | - | - | - | - | - | 40.7% | - | - |
| emotional | - | - | - | - | - | - | - | 51% | - | 51.9% | - | - | - | - | - | - | - | - | - |
| ¶Overall IPV during pregnancy | 28.4% | 31% | 48.6% | 28.7% | 28% | 8% | - | - | - | - | - | 11.6% | 28.3% | 35% | 27.7% | 2.3% | 57.1% | 13.6% | - |
| sexual | 12.9% | 15% | - | - | 6.1% | - | - | - | - | - | - | - | - | 19% | 2.7% | - | - | 26.5% | - |
| physical | - | 36% | - | - | 22.5% | - | - | - | - | - | - | - | - | 40% | 27.8% | - | - | - | - |
| emotional | - | 49% | - | - | - | - | - | - | - | - | - | - | - | 41% | 24.8% | - | - | - | - |

Key: R=Random; NR=Non Random; Y= Yes, N= No; WHO World Health Organization; CTS Conflict Tactics Scale; AAS= Abuse Assessment Screen; CS= Cross Section; CH= Cohort, intvr= Interviewer administered *before pregnancy; ¶includes all types of violence (physical, emotional, sexual)

Table 2: Items used to measure quality of studies.

| Quality item | No. of studies (N=19) | Percentage (100%) |
|---|------------------------------|--------------------------|
| Use of adequate sampling methods | 8 | 42% |
| Specification of the target population | 19 | 100 |
| Adequate sample size (≥ 300) | 17 | 89.4% |
| Adequate response rate ($\geq 80\%$) | 10 | 53% |
| Used known validated and tested tools | 8 | 42% |
| Reporting confidence intervals or standard errors | 11 | 58% |
| Adjusting for confounding variables in analysis | 10 | 53% |
| Attempt to reduce bias | 19 | 100% |



Table 3: Relationship between HIV and IPV during pregnancy.

| Author | Variable related to IPV | Measurement | HIV status check |
|------------------------------------|---|---|--|
| Dunkle, Jewkes <i>et al</i> (2004) | HIV positivity | $p=0.002$; OR 1.48 95% CI 1.15-1.89 | Determine Rapid and Capillus tests |
| Ezechi <i>et al</i> (2009) | HIV negativity of spouse (study was done among HIV+ women)* | $p=0.001$; OR 3.1 95% CI 2.4-5.3 | Laboratory HIV test for women and women's report for spouses' status |
| Hoque <i>et al</i> (2003) | Knowing own HIV status | $p=0.000$ OR 2.93 95% CI 1.79-4.81 | Self-reported |
| Olagbuji <i>et al</i> (2010) | HIV positivity | $p=0.02$, OR 2.81 95% CI, 1.2–6.5 | Self-reported |
| Ntaganira <i>et al</i> (2008) | HIV positivity | $p<0.001$;OR 2.38 95% CI 1.59- 3.57 | ANC clinic records |
| Ntaganira <i>et al</i> (2009) | HIV positivity | p value not stated (non-significant) OR 1.06 95% CI 0.66- 1.73 | ANC records |
| Kaye <i>et al</i> (2006) | HIV positivity | p -value not stated (non-significant) | Not reported |
| Karamagi <i>et al</i> (2006) | HIV test last pregnancy | p -value not stated (non-significant) OR 1.8, 95% CI 0.6–5.3 | Self-reported |
| | HIV talk with husband | p value not stated (non-significant) OR 1.6, 95% CI 1.0–2.6 | Self-reported |

*Comparison group was non-abused women; $p=p$ value; OR= Odds Ratio; CI= Confidence Interval



Table 4: Relationship between history of violence and IPV during pregnancy.

| Author | Variable related to IPV during pregnancy | Measurement |
|-------------------------------------|--|--|
| Dunkle, Jewkes <i>et al</i> (2004a) | Child sexual abuse | RR 2.43; 95%CI 1.93-3.06 |
| | Forced first sexual intercourse | RR 2.64; 95%CI 2.07-3.38 |
| Kaye <i>et al</i> (2002) | Witnessing abuse in childhood | $p=0.000$ |
| | Physical abuse in childhood | $p=0.023$ |
| Ntaganira <i>et al</i> (2008) | Abuse in childhood | OR 2.69; 95%CI 1.69-4.29 |
| Ntaganira <i>et al</i> (2009) | Any form of violence | $p=0.0001$ |
| Olagbuji <i>et al</i> (2010) | IPV 12 months before pregnancy | $p<0.0001$ OR 274.34; 95% CI 66.4-1133.8 |
| Karamagi <i>et al</i> (2006) | Sexual violence | OR 3.7; 95% CI 2.1– 6.6 |
| Ezechi <i>et al</i> (2009) | Abuse before HIV test | $p=0.003$ |

$p=p$ value; CI= Confidence Interval; OR=Odds Ratio RR=Risk Ratio



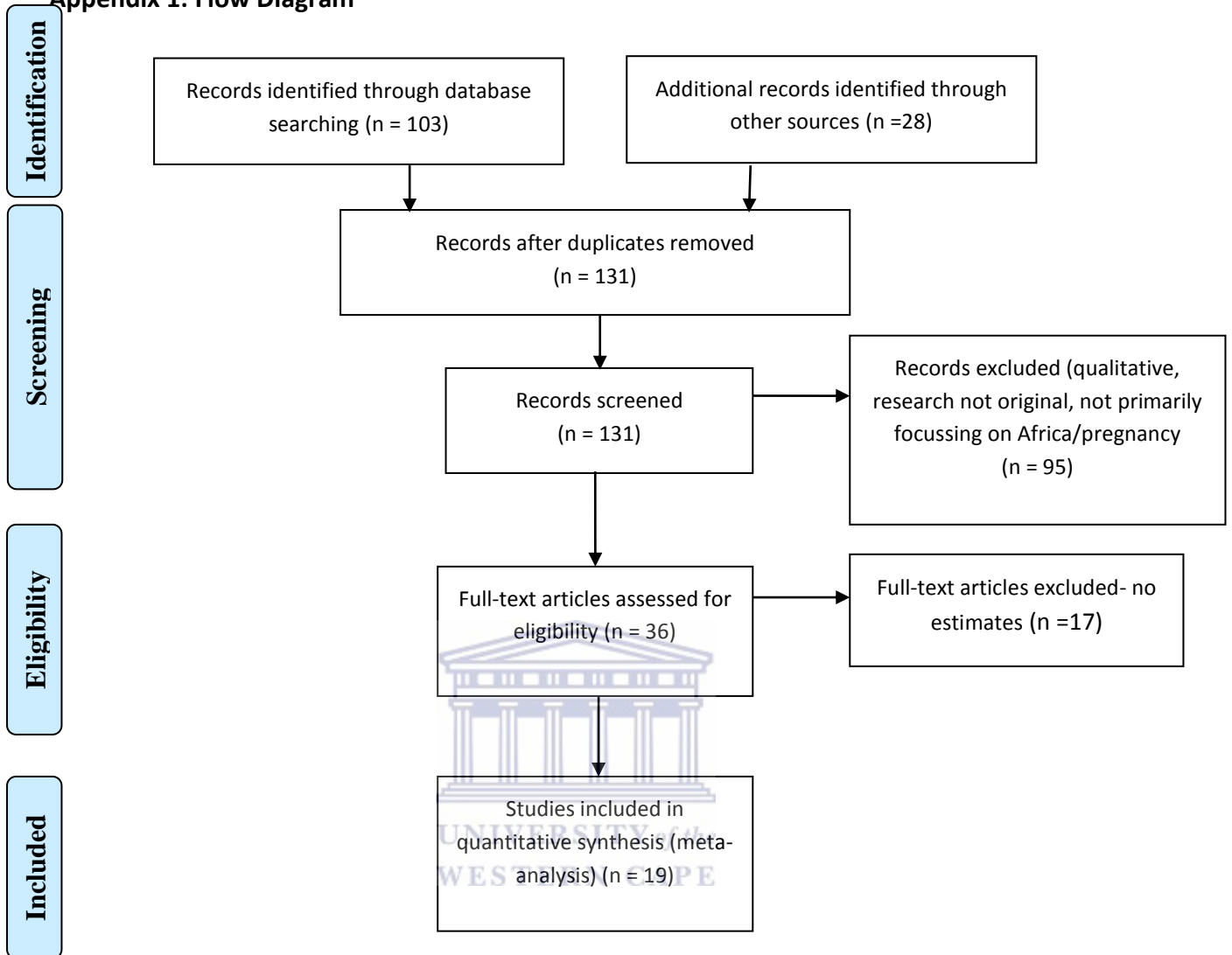
Table 5: Relationship between alcohol use and IPV during pregnancy.

| Author | Variable related to IPV | Measurement |
|----------------------------------|-------------------------------------|---------------------------------------|
| Dunkle, Jewkes <i>et al</i> 2004 | Woman's alcohol/drug problem | $p=0.0002$ OR 4.59; 95% CI 2.54-8.30 |
| Olagbuji <i>et al</i> 2010 | Woman regularly takes alcohol | $p<0.0001$ OR 11.60; 95% CI 3.8-35.1 |
| Ntaganira <i>et al</i> 2008 | Partner heavily drinks alcohol | $p=0.0001$ OR 3.37; 95% CI 2.05-5.54 |
| | Partner occasionally drinks alcohol | OR 4.10 95% CI 2.48-6.77 |
| Ntaganira <i>et al</i> 2009 | Partner occasionally drinks alcohol | OR 2.52 95% CI 1.35-4.71 |
| | Partner heavily drinks alcohol | OR 3.85; 95% CI 1.81-8.21 |
| Fawole <i>et al</i> 2008* | Partner drinks alcohol | $p<0.001$; OR 2.89; 95% CI 1.51-5.53 |

p = p value; OR= Odds Ratio; CI= confidence Interval; *alcohol abuse was related to IPV 12 months before pregnancy



Appendix 1: Flow Diagram

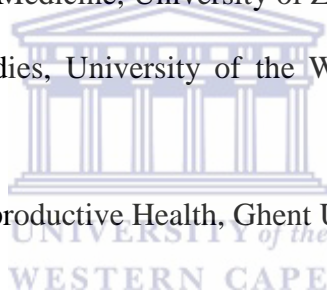


Chapter Six

PAPER II: INTIMATE PARTNER VIOLENCE DURING PREGNANCY IN ZIMBABWE: A CROSS-SECTIONAL STUDY OF PREVALENCE, PREDICTORS, AND ASSOCIATIONS WITH HIV

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Abstract

Background: To describe the occurrence, dynamics and predictors of IPV during pregnancy, including links with HIV in urban Zimbabwe.

Methods: A cross-sectional survey of 2042 postnatal women aged 15-49 years was conducted in six public primary health care clinics in low-income urban Zimbabwe. An adapted WHO questionnaire was used to measure IPV. A multivariate logistic regression analysis was conducted to assess factors associated with IPV and severe (six or more episodes) IPV during pregnancy.

Results: 63.1% of respondents reported physical, emotional and/or sexual IPV during pregnancy: 46.2% reported physical and/or sexual violence, 38.9% sexual violence, 15.9% physical violence, and 10% reported severe violence during pregnancy. Physical violence was lower during pregnancy than during last 12 months before pregnancy (15.9% [95% CI 14.3%-17.5%] vs. 21.3% [95% confidence interval 19.5%-23.1%]). Reported rates of emotional (40.3% [95% CI 38.1%-42.3%] vs. 44.0% [95% CI 41.8%-46.1%]) and sexual violence (35.6% [95% CI 33.5%-37.7%] vs. 38.9% [95% CI 36.8%-41.0%]) are high during and before pregnancy. Factors associated with IPV and severe IPV include having a younger male partner, gender inequities, past abuse, problem drinking, partner control of woman's reproductive health and risky sexual practices. HIV status was not associated with either IPV or severe IPV but reporting a partner with a known HIV status was associated with decreased likelihood of severe abuse.

Conclusion: The rates of IPV during pregnancy are among the highest ever reported globally. Primary prevention of violence during childhood through adolescence is urgently needed while antenatal care may provide an opportunity for secondary prevention but this requires further work. The relationship between IPV and HIV is complex in contexts where both IPV and HIV are endemic.

Introduction

Intimate partner violence (IPV) is a serious public health and human rights problem across the globe with negative impacts on women's and child health as well as high use of health services (Campbell 2002, WHO 2005). IPV during pregnancy increases women's vulnerability to additional ill-health both to herself and to her unborn child through changes in physical, social, sexual and economic circumstances during pregnancy (Heise, Ellsberg *et al.* 2002, Shah and Shah 2010). The WHO multi country study on violence and women's health found 1- 28% women reporting violence during pregnancy across 10 countries (Garcia-Moreno *et al.* 2005). A more recent systematic review of the prevalence of IPV during pregnancy in Africa found a wider range of between 2.3% to 57.1% women reporting such violence (Shamu, Abrahams *et al.* 2011). Gender-based-violence including IPV is considered a structural driver of HIV (Jewkes, Dunkle *et al.* 2006, Auerbach, Parkhurst *et al.* 2011) but some studies show insignificant associations between IPV and HIV (Nyamayemombe, Mishra *et al.* 2010, Hallet, Aberle-Grasse *et al.* 2006).

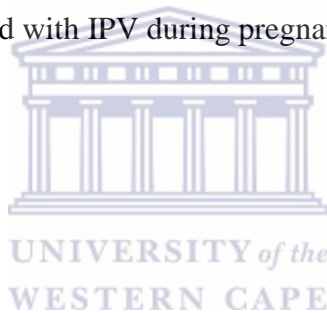
Two systematic reviews of risk factors associated with IPV during pregnancy found young age, poverty, marital status, past exposure to violence (childhood sexual abuse), and alcohol abuse as consistent risk factors across studies (Taillieu and Brownridge 2010, Shamu, Abrahams *et al.* 2011). Sexual risk behaviours and HIV positive status were associated with IPV in some studies but not others (Campbell, Baty *et al.* 2008, Shamu, Abrahams *et al.* 2011). Similar risk factors have been reported in studies of IPV overall (Jewkes 2002, Jewkes, Levin *et al.* 2002, Abramsky, Watts *et al.* 2011). Perpetration studies have provided further evidence of the role of gender inequality and male controlling behaviours (Jewkes, Dunkle *et al.* 2006, Jewkes, Nduna *et al.* 2012). All of these factors are critical for intervention, which has been a neglected research area. Jewkes' (Jewkes 2010) conceptual

framework, based on evidence across the world, postulates that gender-based-violence and HIV risk both stem from gender inequity and also deepen gender power differentials. Male power dominance in relationships and recurring exercise of violence against partners teach women not to resist attempts to abuse women.

Three reviews of studies on IPV during pregnancy (Devries, Kishor *et al.* 2010, Taillieu and Brownridge 2010, Shamu, Abrahams *et al.* 2011) showed significant diversity across studies both in methods and conceptualization of IPV, resulting in wide ranges of reported prevalence rates. Variations in the time during pregnancy when the interviews were conducted affect prevalence reported - those conducted at the onset of pregnancy record lower prevalence (Johnson, Haider *et al.* 2003), whilst those conducted at the end of pregnancy or soon after delivery record higher prevalence (Farid, Saleem *et al.* 2008). Some studies also interviewed women as long as 18 months (Guo, Wu *et al.* 2004) or even - in Demographic and Health Surveys (DHS) - five years after delivery, likely resulting in lower prevalence due to recall bias. There are also differences in the number of pregnancies in which IPV was measured: some studies measured IPV in one pregnancy; others referred to all pregnancies a woman had ever had in the case of the DHS (Devries, Kishor *et al.* 2010), also influencing prevalence and comparability. Many studies use small sample sizes, especially those from Africa (Shamu, Abrahams *et al.* 2011). IPV has been operationalised in different ways, although studies are increasingly using common instruments (Rabin, Jennings *et al.* 2009). In addition to methodological differences, different prevalence rates also reflect real, substantive differences between cultures (Shamu, Abrahams *et al.* 2011).

The antenatal and postnatal periods have been identified as windows of opportunity for identifying women who experience abuse for development of interventions. This is very

relevant for Zimbabwe where up to 91.4% pregnant women attend antenatal care clinics with similar high levels of use of health services in the postpartum period (Munjanja, Nystrom *et al.* 2009). The country has high coverage of antenatal and post-natal care despite the current political and economic problems. Only two studies on IPV have been conducted in Zimbabwe over the past two decades but neither focused on pregnancy (Watts, Keogh *et al.* 1998, CSO and Macro 2007). Measuring the prevalence of IPV during pregnancy helps us to understand IPV. Understanding the factors associated with IPV during pregnancy is necessary to plan prevention interventions with both men and women, as well as appropriate health sector interventions. In this article, we present the findings of a study reporting the prevalence of various forms of IPV including severity of the abuse throughout the pregnancy period as well as factors associated with IPV during pregnancy.



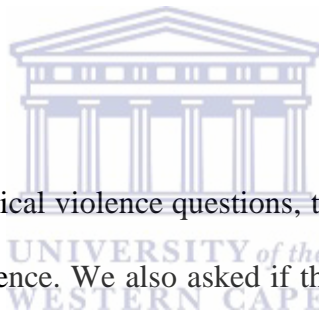
Methods

A Cross-Sectional Study

A cross sectional study of postnatal 15- to 49-year-old women attending either 10 days or six weeks postnatal clinics, was conducted at six low income urban clinics in Harare, between May and September 2011. We calculated a sample size (2024 participants) based on the South African study (Dunkle 2004). Following the WHO (Garcia-Moreno, Jansen *et al.* 2005) Guidelines, we recruited and trained female interviewers (six) for seven days before conducting fieldwork. We conveniently recruited participants from the clinic queues and administered the questionnaire (face-to-face interviews) in Shona to all women until the required number was reached.

Data collection

We adapted the WHO multi-country study questionnaire (WHO 2005) to measure violence against women for the study. The adaptation included adding the pregnancy period to IPV questions and adding HIV-related factors to the questionnaire. The questionnaire covered socio-demographic characteristics, behaviours, reproductive health and sexual risk factors of women and their current or most recent partners. The choice of variables for risk factor analysis was based on previous theoretical studies (Jewkes 2010) especially the ecological basis of risk factors (Heise 1998), literature in Zimbabwe (Sumba 2001) and our formative qualitative research with women and midwives about local patterns and meanings of sexuality and violence, particularly in intimate partnerships (Shamu, Abrahams *et al.* 2012). We tested the questionnaire among 60 postnatal women at a clinic and the necessary adaptations were made.



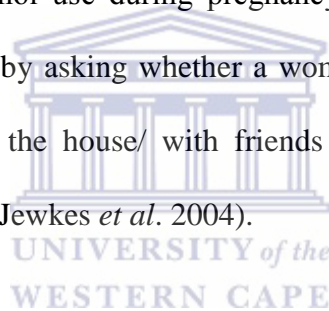
IPV was measured using six physical violence questions, three sexual violence questions and four questions for emotional violence. We also asked if the violence was experienced in the year before her most recent pregnancy to measure past year violence. Answering positive to one question in each of the specific types of violence was coded as that type of violence. To measure frequency and severity, we asked if any of these acts happened once, twice, thrice or more during pregnancy and these were coded as low frequency (1-2 experiences) and high frequency (3 or more experiences) during pregnancy.

We assessed whether a woman ever experienced physical and/or sexual abuse before age 15. The physical abuse question asked whether, before age 15, anyone ever excessively beat or physically mistreated her in any way. Child sexual abuse assessed whether anyone ever forced her to have sex or to perform a sexual act or ever touched her sexually, when she did not want to. Because it is socially acceptable in Zimbabwe for parents and teachers to beat a

child to enforce discipline (Shumba 2001), questions were phrased using the term “excessive” to identify abuse from culturally acceptable disciplinary measures. This also emerged during the pilot study. An experience of either physical and/or sexual or both was coded child abuse.

Respondents were asked whether their first sexual intercourse occurred when they were willing, tricked, persuaded, forced or raped. Our variable forced first sexual intercourse referred to respondents who reported non-consensual first sex.

Respondents’ and partners’ alcohol use during pregnancy and partner’s problem drinking during pregnancy were assessed by asking whether a woman ever had money problems, or there were conflicts/violence in the house/ with friends or authorities as a result of the partner’s use of alcohol (Dunkle, Jewkes *et al.* 2004).



We adapted concepts from three scales to measure gender equity in relationships (García-Moreno, Ellsberg *et al.* 2005, Jewkes, Dunkle *et al.* 2006, Gilbert, El-Bassel *et al.* 2007), specifically women’s attitudes towards wife beating situations (six questions), sexual abuse situations (six) and partner controlling behaviours (six), with unstandardised Cronbach’s alpha for the three scales of 0.75, 0.69 and 0.60 respectively. The sexual abuse scale was dichotomised with zero representing the endorsement of two or less sexual abuse attitudes whilst one represented more than two sexual abuse attitudes. A three level variable (none, 1-2 attitudes/behaviours and 3-6 attitudes/behaviours) was created for both wife beating and controlling behaviours to measure the relative importance of fewer and more negative

attitudes/behaviours on violence experiences whilst compared to none (Dunkle, Jewkes *et al.* 2004).

Reproductive health- and pregnancy-related questions comprised: women's lifetime contraception use; number of pregnancies in lifetime; age at first pregnancy; women and partners' willingness and decision making to become pregnant (recent pregnancy) and use of antenatal care services during recent pregnancy.

Sexual risk practices

We sought and obtained respondents' informed written consent to access their HIV test results from the antenatal clinic. HIV status was collected. The results were based on HIV diagnostic tests conducted at the clinics during antenatal care. The clinics used the Determine™ rapid test with positive results confirmed using Capillus, and the Western blot used to resolve any conflicts. We also asked respondents whether their partners knew their (own) HIV status.

We measured HIV risk practices using questions drawn from the Sexual Risk Behaviour Questionnaire tested in the United States (Gilbert, El-Bassel *et al.* 2007) and repeated in South Africa (Dunkle, Jewkes *et al.* 2004, Jewkes, Dunkle *et al.* 2006) ever treated for STI during most recent pregnancy: ever engaging in anal sex; ever having sex with partners who inject drugs; if partner ever had an STI and respondents' ever engagement in transactional sex for material gain.

The study followed the WHO guidelines for researching violence against women and girls. Ethical clearance for the study was received from the Medical Research Council of Zimbabwe and the University of the Western Cape.

Data analysis

After data had been entered, a random 10% sample was checked for validation and minor discrepancies which did not require re-entry of all data set were fixed. Data were cleaned and prepared for analysis in Stata version 11 (StataCorp 2009). Prevalence using percentages and confidence intervals (CIs) of emotional, sexual and physical violence during pregnancy as well as prevalence of combined forms of violence such as physical and/or sexual violence and physical, sexual and/or emotional violence during pregnancy were calculated. Lifetime experiences and frequency of violence were also calculated. Socio-demographic, behavioural, reproductive health and HIV-risk characteristics of women and those of their partners were described by experience of violence during pregnancy using chi-square tests to determine differences between the groups. We summarised continuous variables using standard deviations. Our primary analysis was to determine factors associated with physical and/or sexual IPV and severe physical and/or sexual IPV during pregnancy, and an exploratory analysis at univariate level was done to identify factors for the building of the multivariate models. A multivariate logistic regression model was developed with candidate variables grouped into four clusters and the model was built first with the demographic factors at the base adding the behavioural factors followed by the pregnancy factors and lastly adding the HIV-related factors. We developed two models: one to determine factors associated with ever experiencing physical and/or sexual violence during recent pregnancy (*vs.* no violence and a second to determine the factors associated with severe violence during recent pregnancy

defined as experiencing six or more episodes of physical and/or sexual violence during pregnancy (*vs.* five or fewer episodes).

We adjusted the models for known covariates, that is, those that could influence experience of violence (age, education, past violence, interviewer effects and time of interview) and tested for interactions. We used backward stepwise regression analysis by first fitting all candidate variables at each stage (e.g. fitting all socio-demographic variables in the first stage) and removing variables which were not significant at the 5% level, starting with one with the highest *p*-value until a best fitted model was achieved with the remaining significant variables.

Findings

We approached 2101 women. 25 refused to participate, six were ill or incapacitated and a further 28 incomplete questionnaires were removed from the analysis, giving a response rate of 97.1%. This analysis is based on the remaining 2042 women, of which 1156 (56.6%) were interviewed when attending the clinic on the tenth day after giving birth. 886 (43.4%) were interviewed on their sixth week postnatal clinic visit. Respondents' age ranged from 15 to 48 years with a mean of 26 years [standard deviation (SD) 5.71 years]; their partners' mean age was 31.3 (SD: 6.49 years; range 18-68 years). Table 2 shows participants' socio-demographic characteristics. More than nine in ten had at least 11 years of formal education. More than a third (35%) had been pregnant only once; more than half (53.4%) had a pregnancy before the age of 20.

Table 1 shows the prevalence of the various forms of violence measured. Overall 63.1% reported physical, sexual and/or emotional violence. 44% women reported emotional abuse,

38.9% sexual violence and 15.9% physical violence during recent pregnancy. Nearly half (46.2%) reported physical and/or sexual violence. Nearly a third of the women (30.2%) reported high frequency sexual violence (three or more episodes) while one in ten (10.1%) reported six or more episodes of physical and/or sexual violence during pregnancy. The range of IPV episodes during pregnancy ranged from 0-22. Nearly one in two women (46.3%) reported physical and/or sexual abuse during the 12 months before pregnancy, and 15.5% reported their first sexual intercourse as forced or raped. Two-thirds (65%) of the women had ever experienced physical and/ or sexual IPV.

Table 2 shows significant differences found for partner variables, with more violence reported if partners were younger, more educated, had other wives, had not paid a bride price and if they did not live with relatives. Significant differences were found for all variables on past violence, gender equity and alcohol abuse during pregnancy (Table 3) except for women's sexual abuse attitudes ($p=0.062$). Among the pregnancy-related factors (Table 4), more violence was reported if either the woman or her partner independently decided to become pregnant ($p<0.0001$), if women were unwilling to become pregnant ($p<0.0001$) and if partners prevented women from using contraception or visiting antenatal care ($p<0.0001$). More violence was reported by respondents who reported having more than three lifetime sexual partners ($p=0.028$), were treated for STI during the recent pregnancy ($p<0.0001$), ever had transactional sex ($p<0.0001$), were HIV positive ($p=0.64$), had partners who tested STI positive and did not know their HIV status ($p<0.0001$).

Table 5 shows the factors associated with both physical and/or sexual violence and severe physical and/or sexual violence during pregnancy. The socio-demographic variable associated with physical and/or sexual violence was having a partner younger than 30 years,

while having a partner with more than one wife was associated with severe violence. There were similarities with the behavioural factors associated with both levels of violence experienced which included forced first sexual intercourse, women's use of alcohol during pregnancy, experiencing three or more partner controlling behaviours, reporting that a partner fought with another man, quarrelling with partner and having been injured by a partner. Severe violence during pregnancy was also associated with partner's problem drinking and women endorsing three or more wife-beating attitudes, whilst physical and/or sexual violence was also associated with child abuse and women endorsing three or more sexual abuse attitudes.

More reproductive health and pregnancy-related factors were associated with physical and/or sexual violence but not severe violence during the pregnancy. Younger age at first pregnancy, woman and partner independently wanting the pregnancy and women's decision to become pregnant were associated with physical and/or sexual abuse. The only pregnancy and reproductive health related factors associated with severe violence were partners preventing women from using contraception and attending antenatal care. HIV-related risk factors were only associated with severe violence (*vs.* less severe violence) and the only significant factor was partner's knowledge of his HIV status, which was associated with lower likelihood of severe abuse.

Discussion

This is the first Zimbabwean study with a focus on IPV during pregnancy. The only two previous studies on prevalence of IPV during pregnancy were conducted in 1998 measuring violence in one region (Watts, Keogh *et al.* 1998) and in 2005 when the violence module was added to the DHS (CSO and Macro 2007). Although direct comparisons cannot be made due

to different study designs, these studies reported only physical IPV during pregnancy that was 8.3% (CSO and Macro 2007) and 9.9% (Watts, Keogh *et al.* 1998), which are considerably lower than what we found (15.9%). Similarly, our study reported a prevalence of physical and/or sexual violence of 46.2%, which is much higher than 13.5% reported in a review based on data from 19 DHS and International Violence Against Women Surveys (Devries, Kishor *et al.* 2010).

The higher rates reported could be because our study was clinic-based, using a different sample from population studies, but more importantly, we referred to the most recent pregnancy, and interviews were conducted within 10 days to six weeks of giving birth, which potentially reduces recall bias. Previous studies in Zimbabwe measured violence in any pregnancy a woman ever had (Watts, Keogh *et al.* 1998, CSO and Macro 2007). A similar difference between an antenatal based study and a DHS in South Africa despite them having identical questions has been reported (Dunkle, Jewkes *et al.* 2004). The antenatal health setting in our study may also have allowed greater disclosure of violence compared to the home where the perpetrator may hinder disclosure (Covington, Hage *et al.* 2002, Dunkle, Jewkes *et al.* 2004, Alhabib, Nur *et al.* 2010). Much lower prevalence was also reported in a global review with between 1.3% and 12.6% of physical, sexual and/or emotional violence during pregnancy but up to 36% were reported in developing countries (Taillieu and Brownridge 2010) compared to our estimate of 63%. Very high gender inequalities reported in this study could be influencing higher IPV rates.

The high prevalence of IPV reported in our study could have been due to this study measuring IPV that took place in the entire pregnancy period. Most other studies collected data in the 1st or 2nd trimester (Leung, Leung *et al.* 1999, Johnson, Haider *et al.* 2003, Fawole,

Hunyinbo *et al.* 2008). The importance of including the full period of pregnancy was demonstrated to us during the formative qualitative study when reports of sexual and emotional violence during the third trimester were very prominent in women's accounts of their experiences (Shamu, Abrahams, *et al.* 2012).

The measurements of past IPV (twelve months before pregnancy) allowed us to compare violence in pregnancy and outside pregnancy. We found no difference contrary to studies that reported more past physical and/or sexual violence before pregnancy than during pregnancy (Guo, Wu *et al.* 2004). Although physical violence decreased (from 21.3% [95% CI 19.5%-23.1%] to 15.9% [95% CI 14.3%-17.5%]), reports of emotional violence (40.3% [95% CI 38.1%-42.3%] to 44.0% [95% CI 41.8%-46.1%]) and sexual violence (35.6% [95% CI 33.5%-37.7%] to 38.9% [95% CI 36.8%-41.0%]) suggest increasing, though not statistically significant trends, that pregnancy may be associated with increasing non-physical forms of violence. The lower rates of physical violence may be an indication of men reducing this type of abuse during pregnancy because of the value they place on the unborn child, whilst forcing sex and emotional abuse are not perceived in the same way. Reasons for increased sexual violence during pregnancy – particularly in the last trimester – were reported in the formative study (Shamu, Abrahams, *et al.* 2012) where women reported that men fail to understand the physical and emotional changes pregnancy brings about and wanted frequent sexual intercourse as before the pregnancy, whilst women were less willing to have sex, finding positions more difficult or uncomfortable. Such excuses were often not accepted or understood by their partners, resulting in conflict and forced sex. These experiences confirm the continued male dominance, control and entitlement to sex that is still common in many African cultures and have been described as the extension of the transfer of a woman's

sexuality rights from her father to a husband through traditional marriage payments (Ansell 2001).

Socio-demographic and behavioural risk factors

Although our study was conducted in a poor community where most respondents were unemployed (70%) and economically dependent on their partners who were un/semi-skilled employees, which could have increased their likelihood of experiencing violence, none of the poverty indicators such as low education and unemployment were significantly associated with experiencing IPV during pregnancy. This is inconsistent with findings from studies conducted in similarly less industrialised, less educated and poor communities, which found lower socio-economic status as a risk factor for IPV in Peru (Perales, Cripe *et al.* 2009), Pakistan (Farid, Saleem *et al.* 2008) and among poor Black Americans (Shumway 1999, Covington, Hage *et al.* 2002). The lack of an association with poverty indicators in our study may be a result of the endemic poverty in Zimbabwe, and may also reflect the current economic and political crisis. It is also possible that the lack of variability in our measure of poverty resulted in an apparent lack of effect. Our sample reported high levels of formal education, suggesting that current poverty may not reflect multi-dimensional or lifetime deprivation. The only demographic factor associated with violence during pregnancy was the partner age; younger men were more likely to abuse their partners, which is consistent with findings from IPV studies conducted in South Africa (Jewkes, Levin *et al.* 2002, Jewkes, Dunkle *et al.* 2006). This association between young men and violence may be due to young men lacking experience in handling misunderstandings and conflicts in a marriage.

This study provides evidence on how unequal gender norms promote violence. We found all gender inequity factors (women's sexual abuse attitudes, wife beating attitudes and partner's

controlling behaviours) associated with both forms of IPV that we measured. The finding confirms what has been reported in studies performed with pregnant and non-pregnant women (Jewkes, Levin *et al.* 2002, García-Moreno, Ellsberg *et al.* 2005, Jewkes, Dunkle *et al.* 2006, Clark, Bloom *et al.* 2009) as well as perpetration studies where men's use of violence against partners was associated with greater gender inequality (Jewkes, Sikweyiya *et al.* 2011) and partner violence is part of a broader control of women by men (Dunkle, Jewkes *et al.* 2004). IPV could potentially alter gender norms (Jewkes 2010), and ultimately forcing abused women to endorse attitudes towards wife beating, sexual abuse and controlling behaviours. An intervention to improve relationship communication has been developed and tested with a study in South Africa among young men and women showing a decrease in IPV (Jewkes, Dunkle *et al.* 2010). Continued development and testing of such interventions are urgently needed.



The explanation of why women under 20 years of age at first pregnancy were less likely to be abused may be further evidence of the role of gender inequality as these women may have learned to be submissive to their partners and may therefore avoid abuse by their compliance. The association between IPV and being in a polygamous relationship was previously reported in Zimbabwe (Nyamayemombe, Mishra, *et al.* 2010) and although this has not been explored and is not fully understood – economic demands of a pregnant wife could increase her vulnerability to violence by a husband. Violence between co-wives because of competition for limited resources, including attention of husband, has been anecdotally reported.

Our results suggest that abuse during pregnancy is not an isolated incident in a woman's life but appears to be part of a lifetime process. The association with abuse before the age of 15, forced first sexual intercourse and ever being injured has been reported in both IPV during

pregnancy studies (Ntaganira, Muula *et al.* 2008) and general IPV studies (Jewkes, Levin *et al.* 2002) in Africa. Violence prevention interventions should start during childhood because targeting the pregnancy period is too late as women learn to accept violence as a means to punish misbehaviour from childhood (Dunkle *et al.* 2004a). The frequency of abuse during pregnancy also indicates that violence is not a once-off event during the pregnancy with one in 10 women experiencing more than six events during their pregnancy. We do not know of other studies that report the frequency of violence during pregnancy. Such persistent violence may have chronic health problems to the woman and negative consequences to the unborn child.

It is a concern that alcohol use during pregnancy by the women and partners was found associated with abuse. This, however, has been reported in many studies of IPV during pregnancy (Dunkle, Jewkes *et al.* 2004, Fawole, Hunyinbo *et al.* 2008, Ntaganira, Muula *et al.* 2008, Ntaganira, Muula, *et al.* 2009, Olagbuji, Ezeanochie *et al.* 2010, Eaton, Kalichman *et al.* 2012). The relationship between IPV and alcohol use is complex because it can be bidirectional with alcohol drinking leading to IPV or IPV leading to alcohol drinking (Bacchus, Mezey *et al.* 2006, Widom, Schuck *et al.* 2006) or may involve both partners (Pallitto and O'Campo 2004).

Pregnancy-related risk factors

Many studies in the past decade assessed the association between pregnancy intention or unplanned pregnancy and IPV during pregnancy without defining whose intention it was to become pregnant (Goodwin, Gazmararian *et al.* 2000, Pallitto and O'Campo 2004, Silverman, Gupta *et al.* 2007, Cripe, Sanchez *et al.* 2008, Fanslow, Silva *et al.* 2008). In our study, we analysed whose intention (both, woman's, partner's or unintended) it was to become pregnant

as well as the willingness for the pregnancy. We found that if a woman decided on her own to become pregnant, she was at greater risk to experience IPV during the pregnancy. We also found that if the partner wanted her to become pregnant, she was protected from experiencing violence. It is possible that being victimised by a partner leads to a pervasive sense of “everyday violence” that undermines women’s self-efficacy, which pre-disposes them to believe that they themselves desire children when in fact they are simply mirroring their abusive partners’ desires or leads to less reproductive control and unintended pregnancy (Tsai and Subramanian 2012). This relation between pregnancy decision-making and violence links to the central role male domination has in women’s sexuality and reproductive health issues as discussed earlier. The increase in vulnerability of women may be explained in Zimbabwean economic context where women’s decisions to have children are in conflict with men’s roles of being providers. Men’s traditional role of deciding how many children a couple could have including when to have another pregnancy could be related to the economic hardships facing people in Zimbabwe where men struggled to raise income for family upkeep during the time of study. The link between sexual and reproductive health and poverty has been reported in Zimbabwe in the context of HIV decline (Gregson, Garnett *et al.* 2006, Hallett, Aberle-Grasse *et al.* 2006, Halperin, Mugurungi *et al.* 2011) with men limiting their sexual partners as resources to provide for them diminished. Such control of decision making in Zimbabwean households soon after marriage has been described (Matavire 2012), and the struggle to teach women about their reproductive health rights was recognised more than a decade ago (Njovana and Watts 1996). Abused pregnant women were more likely to report being stopped from using contraception before the pregnancy or prevented from accessing antenatal care, confirming the male domination in decisions of sexual and reproductive health. Similar findings were reported in India (Koski, Stephenson *et al.* 2011), while two studies from the US reported several ways in which men exercised control over

women's reproductive health (Miller, Decker *et al.* 2010, Moore, Frohwirth *et al.* 2010). However, such research is needed to help us understand the relationship between violence and reproductive health decision making including specific factors including type of contraception use. Continued effort is needed to target men in reproductive health programmes to ensure sharing of reproductive health decisions in programmes such as the low-cost antenatal visit-specific short educational interventions, which was able to reduce women's odds of reporting reproductive coercion by 71% in the USA (Miller, Decker *et al.* 2011). Such interventions may be adapted in developing countries such as Zimbabwe to help women with abusive partners.

HIV and HIV-related risk factors

No HIV-related factors were found to be associated with both physical and/or sexual violence and severe physical and /or sexual violence except that a decrease of severe violence was associated with women's partners knowing their own HIV status. This finding implies that if men know their status, they would treat their partners better. It might also mean that they had communicated about HIV and testing although our study did not explore this further. The lack of association between violence and HIV infection found in this study is not surprising and is consistent with recent findings from pooled analysis of 10 low-middle income countries using DHS data (OR 1.05 CI 0.90-1.22) as well as an analysis of individual countries data including Zimbabwe (0.97 CI 0.83-1.15) that found no significant association except for a negative association for Haiti (OR 0.45 CI 0.23-0.90) (Harling, Msisha *et al.* 2010). In a similar analysis of risk factors associated with partner violence using DHS data from Zimbabwe, HIV positive status was not associated with increased odds of experiencing violence (OR1.11 CI 0.91-1.34) (Nyamayemombe, Mishra, *et al.* 2010). Similarly, a study based on DHS population data in Rwanda found that HIV was only associated with severe

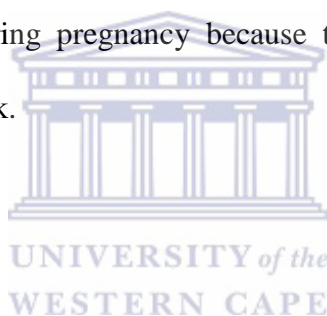
psychological violence but not physical and/or sexual IPV (Kayibanda, Bitera *et al.* 2012). Although we cannot directly compare these findings because these studies were not based on IPV during pregnancy and they analysed data from either currently married (Nyamayemombe, Mishra *et al.* 2010) or ever married (Harling, Msisha *et al.* 2010) women – excluding single women which our study included- they do provide insight on the general epidemiology and complicatedness of the intersections between IPV and HIV in Zimbabwe and across the globe. The lack of a significant relationship between HIV-related factors and violence or severe violence could also be explained by interactions with variables we did not measure. The high prevalence of IPV and HIV may also make the association difficult to find as the two are commonly present in the population. Also, whilst IPV was experienced during pregnancy, we do not know when women were infected by HIV, and therefore, longitudinal studies are best suited to explore the relationship between IPV and HIV status disclosure.

Limitations

The cross sectional nature of the study limits causal inferences. We could not establish the direction of causality between IPV and unequal gender norms. However, as literature suggests, the bidirectional relationship between IPV and unequal gender norms helps us to understand that intervening at one level may alter the other in a positive way. Although the study was about violence during pregnancy, it is not representative of all pregnant women in Harare because 19.4% pregnant women would visit the clinic post-natally (Munjanja, Nystrom *et al.* 2009). However, interviewing women post-natally gave us an opportunity to interview women who reported being stopped from visiting prenatal care, whom we could have missed if we had done interviews during pregnancy. Although we interviewed women who attended the 10 days postpartum visit - a near representative sample of recently pregnant women - we still missed women who aborted, miscarried or were in other circumstances that prevented them from attending a postnatal clinic.

Conclusions

The high rates of IPV during pregnancy among postnatal attendees in this study are among the highest ever reported globally. The study found IPV to be associated with a range of behavioural and pregnancy-related factors but not associated with HIV infection and most demographic factors. Primary prevention interventions are needed in form of community educational campaigns to change gender inequitable norms, beliefs and practices. Lessons about changing gender inequitable beliefs can be learnt from successful interventions with both adults (Dunbar, Maternowska *et al.* 2010) and young people (Hallfors, Cho *et al.* 2011) in Zimbabwe. Secondary prevention mechanisms by midwives in antenatal and postnatal care settings should address IPV during pregnancy because these are unique opportunities to consistently contact women at risk.



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Table 1: Prevalence and 95% Confidence Intervals of various forms of violence (N=2042)

| Violence during pregnancy | n/N | % (95% Confidence Interval) |
|---|------------|------------------------------------|
| Emotional violence | 898/2042 | 44.0 (41.8-46.1) |
| Physical violence | 325/2042 | 15.9 (14.3-17.5) |
| Sexual violence | 794/2042 | 38.9 (36.8-41.0) |
| Physical and/or sexual violence | 943/2042 | 46.2 (44.0- 48.3) |
| Physical, emotional and/or sexual violence | 1289/2042 | 63.1 (61.0-65.2) |
| High frequency physical violence (3+ episodes) | 134/2042 | 6.6 (5.5-7.6) |
| High frequency (3+) sexual violence | 617/2042 | 30.2 (28.2-32.2) |
| High frequency (3+) physical and/or sexual violence | 694/2042 | 34.0 (31.9-36.0) |
| High frequency (6 + episodes) physical and/or sexual violence | 207/2042 | 10.1 (8.8-11.4) |
| Past emotional violence | 822/2042 | 40.3 (38.1-42.3) |
| Past physical violence | 435/2042 | 21.3 (19.5-23.1) |
| Past sexual violence | 737/2042 | 35.6 (33.5-37.7) |
| Past physical and/sexual violence | 945/2042 | 46.3 (44.1-48.4) |
| Past physical, sexual and/or emotional violence | 1253/2042 | 61.3 (59.2-63.4) |
| Lifetime emotional violence | 1311/2042 | 64.2 (62.1-66.2) |
| Lifetime physical violence | 762/2042 | 37.3 (35.2-39.4) |
| Lifetime sexual violence | 1054/2042 | 51.6(49.4-53.8) |
| Lifetime physical and/sexual violence | 1327/2042 | 65.0 (62.9-67.1) |
| Lifetime physical, sexual and/or emotional violence | 1625/2042 | 79.6 (77.8-81.3) |
| Use of force at first sexual intercourse | 315/2036 | 15.5(13.9-17.0) |

Table 2: Frequency for social- demographic variables for women reporting violence during pregnancy and those not reporting violence during pregnancy (N=2042)

| Variable | Total (%) | No physical/sexual Violence reported | | Physical/sexual Violence reported | | p-value |
|---|--------------------|--------------------------------------|-------|-----------------------------------|-------|---------|
| | | N | % | N | % | |
| Woman's age (n=2038) | | | | | | |
| 15-24 years | 909 (44.6) | 462 | 42.11 | 447 | 47.50 | |
| 25-49 years | 1129 (55.4) | 635 | 57.89 | 494 | 52.50 | 0.01 |
| Marital status (n=2041) | | | | | | |
| Married | 1800 (88.2) | 985 | 89.71 | 815 | 86.43 | |
| Not married | 241 (11.8) | 113 | 10.29 | 128 | 13.57 | 0.02 |
| Woman's education (n=2037) | | | | | | |
| Primary | 148 (7.3) | 69 | 6.30 | 79 | 8.39 | |
| Secondary & tertiary | 1889 (92.7) | 1026 | 93.70 | 863 | 91.61 | 0.07 |
| Woman's employment status (n=2027) | | | | | | |
| Employed | 606 (29.9) | 330 | 30.28 | 276 | 29.46 | |
| Unemployed | 1421 (70.1) | 760 | 69.72 | 661 | 70.54 | 0.68 |
| Partner's age (n=2034) | | | | | | |
| 18-29 years | 929 (45.7) | 462 | 42.23 | 467 | 49.68 | |
| Over 30 years | 1105 (54.3) | 632 | 57.77 | 473 | 50.32 | 0.001 |
| Partner's education (n=2022) | | | | | | |
| Up to secondary | 1734 (85.8) | 955 | 87.94 | 779 | 83.23 | |
| Tertiary | 288 (14.2) | 131 | 12.06 | 157 | 16.77 | 0.003 |
| Partner has other wives (n=1982) | | | | | | |
| Yes | 316 (15.9) | 151 | 14.01 | 165 | 18.25 | |
| No | 1666 (84.1) | 927 | 85.99 | 739 | 81.75 | 0.01 |
| Bride-price payment (n=1984) | | | | | | |
| All | 190 (9.6) | 130 | 12.12 | 60 | 6.60 | |
| Partly | 1413 (71.3) | 764 | 71.20 | 649 | 71.40 | |
| Nothing | 379 (19.1) | 179 | 16.68 | 200 | 22.00 | <0.0001 |
| Couple lived with partner's parent/relative (n=1985) | | | | | | |
| Yes | 1305 (65.7) | 744 | 69.02 | 561 | 61.85 | |
| No | 680 (34.3) | 334 | 30.98 | 346 | 38.15 | 0.001 |

Table 3: Frequency for behavioural variables for women reporting violence during pregnancy and those not reporting violence during pregnancy

| Variable | Total (%) | No physical/sexual violence reported | | Physical/sexual Violence reported | | p-value |
|---|--------------------|--------------------------------------|-------|-----------------------------------|-------|---------|
| | | n | % | N | % | |
| Wife beating attitudes endorsed (n=1980) | | | | | | |
| 0-2 attitudes | 1767 (89.2) | 971 | 91.09 | 796 | 87.09 | |
| 3-6 attitudes | 213 (10.8) | 95 | 8.91 | 118 | 12.91 | 0.004 |
| Sexual abuse attitudes endorsed (n=1877) | | | | | | |
| 0-2 attitudes | 1250 (66.6) | 312 | 68.52 | 315 | 64.45 | |
| 3-6 attitudes | 627 (33.4) | 679 | 31.48 | 571 | 35.55 | 0.062 |
| Experiences of partner's controlling behaviours (n=1962) | | | | | | |
| No behaviours | 472 (24.1) | 309 | 29.43 | 163 | 17.87 | |
| 1-2 behaviours | 1083 (55.2) | 600 | 57.14 | 483 | 52.96 | |
| 3-6 behaviours | 407 (20.7) | 141 | 13.43 | 266 | 29.17 | <0.0001 |
| How often do you quarrel? (n=2025) | | | | | | |
| Rarely | 1466 (72.6) | 844 | 78.29 | 622 | 66.10 | |
| Sometimes | 466 (23.1) | 210 | 19.48 | 256 | 27.21 | |
| Often | 87 (4.3) | 24 | 2.23 | 63 | 6.70 | <0.0001 |
| Child physical and /sexual abuse (n=2033) | | | | | | |
| Yes | 422 (20.8) | 157 | 14.32 | 265 | 28.28 | |
| No | 1611 (79.2) | 939 | 85.68 | 672 | 71.72 | <0.0001 |
| First sexual intercourse was (n=2036) | | | | | | |
| Willing | 1144 (56.2) | 718 | 65.57 | 426 | 45.27 | |
| Persuaded/tricked | 577 (28.3) | 265 | 24.20 | 312 | 33.16 | |
| Forced/raped | 315 (15.5) | 112 | 10.23 | 203 | 21.57 | <0.0001 |
| Ever injured by partner (n=2031) | | | | | | |
| Yes | 142 (7.0) | 26 | 2.39 | 116 | 12.33 | |
| No | 1889 (93.0) | 1064 | 97.61 | 825 | 87.67 | <0.0001 |
| Abused in past 12 months before pregnancy) (n=2042) | | | | | | |
| Yes | 945 (46.3) | 261 | 23.75 | 684 | 72.53 | |
| No | 1097 (53.7) | 838 | 76.25 | 259 | 27.47 | <0.0001 |
| Partner's mother was abused (n=2004) | | | | | | |
| Yes | 225 (11.23) | 104 | 9.67 | 121 | 13.04 | |
| No | 889(44.36) | 481 | 44.70 | 408 | 43.97 | |
| Parents did not live together | 281 (14.02) | 141 | 13.10 | 140 | 15.09 | |

| | | | | | | |
|---|--------------------|------|-------|-----|-------|---------|
| Don't know | 609 (30.39) | 350 | 32.53 | 259 | 27.91 | 0.019 |
| Partner involved in a fight with someone since they partnered (n=1908) | | | | | | |
| Yes | 336 (17.6) | 120 | 11.88 | 216 | 24.05 | |
| No | 1572 (82.4) | 890 | 88.12 | 682 | 75.95 | <0.0001 |
| Woman used alcohol during pregnancy (n=2037) | | | | | | |
| Yes | 139 (6.8) | 52 | 4.75 | 87 | 9.24 | |
| No | 1898 (93.2) | 1043 | 95.25 | 855 | 90.76 | <0.0001 |
| Partner's problem drinking during pregnancy (n=2042) | | | | | | |
| Yes | 388 (19.0) | 141 | 12.83 | 247 | 26.19 | <0.0001 |
| No | 1654 (81.0) | 958 | 87.17 | 696 | 73.81 | |



Table 4: Frequency of reproductive, pregnancy and HIV-related variables for women reporting violence during pregnancy and those not reporting violence during pregnancy

| Variable | Total (%) | No physical/sexual Violence reported | | physical/sexual Violence reported | | p-value |
|--|--------------------|--------------------------------------|-------|-----------------------------------|-------|---------|
| | | N | % | N | % | |
| Age at first pregnancy (n=2038) | | | | | | |
| Up to 19 years | 950 (46.6) | 493 | 44.90 | 457 | 48.62 | |
| 20+ years | 1088 (53.4) | 605 | 55.10 | 483 | 51.38 | 0.094 |
| No. of Lifetime Pregnancies (n=2042) | | | | | | |
| 1-2 pregnancies | 720 (35.3) | 397 | 36.12 | 323 | 34.25 | |
| 3-8 pregnancies | 1322 (64.7) | 702 | 63.88 | 620 | 65.75 | 0.37 |
| Planning of most recent pregnancy (n=2036) | | | | | | |
| Planned together | 830 (40.8) | 493 | 45.02 | 337 | 35.81 | |
| Woman's decision | 157 (7.7) | 76 | 6.94 | 81 | 8.61 | |
| Partner's decision | 488 (23.9) | 240 | 21.92 | 248 | 26.35 | |
| Unplanned pregnancy | 561 (27.6) | 286 | 26.12 | 275 | 29.22 | <0.0001 |
| Woman wanted to become pregnant (n=1994) | | | | | | |
| Yes | 1382 (67.8) | 788 | 71.83 | 594 | 63.06 | |
| No | 657 (32.2) | 309 | 28.17 | 348 | 36.94 | <0.0001 |
| Partner wanted woman to become pregnant (n=1967) | | | | | | |
| Yes | 1553 (76.5) | 851 | 78.00 | 702 | 74.76 | |
| No | 477 (23.5) | 240 | 22.00 | 237 | 25.24 | 0.086 |
| Partner prevented woman from using contraception (n=2032) | | | | | | |
| Yes | 128 (6.3) | 35 | 3.19 | 93 | 9.94 | |
| No | 1904 (93.7) | 1061 | 96.81 | 843 | 90.06 | <0.0001 |
| Partner prevented woman from visiting antenatal care (n=2021) | | | | | | |
| Yes | 39 (1.9) | 14 | 1.29 | 25 | 2.68 | |
| No | 1737 (86.0) | 971 | 89.33 | 766 | 82.01 | |
| Partner had no interest | 245 (12.1) | 102 | 9.38 | 143 | 15.31 | <0.0001 |
| HIV status (n=2042) | | | | | | |
| Positive | 299 (14.6) | 156 | 14.19 | 143 | 15.16 | |
| Negative | 1652 (80.9) | 897 | 81.62 | 755 | 80.06 | |
| Unknown/not tested | 91 (4.5) | 46 | 4.19 | 45 | 4.77 | 0.64 |
| Total lifetime sexual partners (n=2038) | | | | | | |
| 1-2 partners | 1920 (94.2) | 1046 | 95.26 | 874 | 92.98 | |
| 3+ partners | 118 (5.8) | 52 | 4.74 | 66 | 7.02 | 0.28 |
| Treated for STI during pregnancy (n=2031) | | | | | | |
| Yes | 131 (6.5) | 51 | 4.67 | 80 | 8.53 | |
| No | 1900 (93.5) | 1042 | 95.33 | 858 | 91.47 | <0.0001 |

| | | | | | | |
|--|--------------------|------|-------|-----|-------|---------|
| Transactional sex (n=2036) | | | | | | |
| Yes | 318 (15.6) | 131 | 11.94 | 187 | 19.91 | |
| No | 1718 (84.4) | 966 | 88.06 | 752 | 80.09 | <0.0001 |
| Partner ever treated for STI (n=2030) | | | | | | |
| Yes | 120 (5.9) | 45 | 4.12 | 75 | 8.00 | |
| No | 1834 (90.3) | 1016 | 92.96 | 818 | 87.30 | |
| Don't know | 76 (3.7) | 32 | 2.93 | 44 | 4.70 | <0.0001 |
| Ever had a partner who injects drugs (n=2013) | | | | | | |
| Yes | 36 (1.8) | 14 | 1.29 | 22 | 2.38 | |
| No | 1977 (98.2) | 1074 | 98.71 | 903 | 97.62 | 0.066 |
| Partner knows own HIV status (n=2029) | | | | | | |
| Yes | 1174 (57.9) | 686 | 62.88 | 488 | 52.03 | |
| No | 723 (35.6) | 341 | 31.26 | 382 | 40.72 | |
| Don't know | 132 (6.5) | 64 | 5.87 | 68 | 7.25 | <0.0001 |



| Variable | Physical &/or sexual violence during pregnancy | | | | | | | | | Severe physical &/or sexual violence during pregnancy | | | | | | | | | | | | |
|--|--|------|------|---------|------|------|---------|------|------|---|------|------|---------|------|-------|---------|------|------|---------|------|------|--|
| | Stage 1 | | | Stage 2 | | | Stage 3 | | | Stage 1 | | | Stage 2 | | | Stage 3 | | | Stage 4 | | | |
| | AOR | LCI | UCI | AOR | LCI | UCI | AOR | LCI | UCI | AOR | LCI | UCI | AOR | LCI | UCI | AOR | LCI | UCI | AOR | LCI | UCI | |
| Socio-demographic factors | | | | | | | | | | | | | | | | | | | | | | |
| Partner was 30+ years (vs.<30) | 0.74 | 0.56 | 0.96 | 0.67 | 0.49 | 0.90 | 0.66 | 0.48 | 0.89 | | | | | | | | | | | | | |
| Partner has 2+ wives (vs. one) | 1.41 | 1.06 | 1.87 | 1.37 | 0.99 | 1.91 | 1.39 | 0.99 | 1.94 | 2.06 | 1.42 | 2.99 | 1.67 | 1.06 | 2.61 | 1.56 | 0.99 | 2.47 | 1.58 | 1.00 | 2.50 | |
| Partial bride price paid (vs. all) | 1.35 | 0.92 | 1.97 | | | | | | | | | | | | | | | | | | | |
| No bride price paid (vs. all) | 1.63 | 1.06 | 2.51 | | | | | | | | | | | | | | | | | | | |
| Behavioural factors | | | | | | | | | | | | | | | | | | | | | | |
| Child physical &/sexual abuse (vs. no) | | | | 1.45 | 1.08 | 1.96 | 1.47 | 1.08 | 1.99 | | | | | | | | | | | | | |
| Forced first sexual intercourse (vs. willing first sex) | | | | 1.44 | 1.13 | 1.82 | 1.43 | 1.12 | 1.83 | | | | 1.55 | 1.06 | 2.29 | 1.54 | 1.04 | 2.28 | 1.50 | 1.01 | 2.23 | |
| Woman used alcohol during pregnancy (vs. no alcohol) | | | | 2.26 | 1.41 | 3.63 | 2.24 | 1.39 | 3.6 | | | | 2.37 | 1.33 | 4.24 | 2.32 | 1.29 | 4.16 | 2.18 | 1.20 | 3.97 | |
| Partner's problem drinking during preg (vs. n | | | | | | | | | | | | | 2.04 | 1.36 | 3.05 | 2.01 | 1.33 | 3.02 | 1.98 | 1.31 | 3.00 | |
| Endorsing 3-6 sexual abuse attitudes (vs. 0-2 attitudes) | | | | 1.32 | 1.03 | 1.69 | 1.32 | 1.03 | 1.7 | | | | | | | | | | | | | |
| Endorsing 1-2 wife beating attitudes (vs. non attitudes) | | | | | | | | | | | | | 1.25 | 0.84 | 1.88 | 1.24 | 0.82 | 1.86 | 1.19 | 0.79 | 1.80 | |
| Endorsing 3-6 wife beating attitudes | | | | | | | | | | | | | 1.79 | 1.00 | 3.18 | 1.83 | 1.02 | 3.28 | 1.84 | 1.02 | 3.31 | |
| Experiencing 1-2 controlling behaviours (vs. none) | | | | 1.23 | 0.92 | 1.63 | 1.25 | 0.94 | 1.67 | | | | 1.44 | 0.82 | 2.55 | 1.40 | 0.79 | 2.46 | 1.41 | 0.79 | 2.50 | |
| Experiencing 3-6 controlling behaviours (vs. none) | | | | 1.71 | 1.19 | 2.44 | 1.78 | 1.24 | 2.55 | | | | 1.96 | 1.07 | 3.59 | 1.83 | 1.00 | 3.37 | 1.84 | 1.00 | 3.38 | |
| Quarrel sometimes (vs. rarely) | | | | 1.47 | 1.12 | 1.94 | 1.48 | 1.12 | 1.95 | | | | 1.81 | 1.21 | 2.73 | 1.81 | 1.20 | 2.74 | 1.84 | 1.21 | 2.80 | |
| Quarrel often (vs. rarely) | | | | 1.63 | 0.82 | 3.23 | 1.56 | 0.79 | 3.10 | | | | 5.60 | 2.88 | 10.89 | 4.68 | 2.34 | 9.37 | 4.56 | 2.27 | 9.16 | |
| Partner ever fought with another man (vs. no fighting) | | | | 1.67 | 1.21 | 2.3 | 1.73 | 1.25 | 2.40 | | | | 1.84 | 1.21 | 2.80 | 1.78 | 1.17 | 2.72 | 1.76 | 1.15 | 2.69 | |
| Woman ever injured by partner (vs. not injured) | | | | 2.69 | 1.57 | 4.62 | 2.80 | 1.62 | 4.82 | | | | 3.68 | 2.26 | 6.01 | 3.33 | 2.01 | 5.51 | 3.26 | 1.97 | 5.39 | |
| Pregnancy-related factors | | | | | | | | | | | | | | | | | | | | | | |
| Woman wanted to get pregnant (vs. not willing) | | | | | | | 1.46 | 1.01 | 2.11 | | | | | | | | | | | | | |
| Partner wanted her to get pregnant (vs. partner not willing) | | | | | | | 0.64 | 0.42 | 0.99 | | | | | | | | | | | | | |
| Planning of most recent pregnancy : both | | | | | | | Ref | | | | | | | | | | | | | | | |
| Partner only decided | | | | | | | 1.02 | 0.73 | 1.43 | | | | | | | | | | | | | |
| Woman only decided | | | | | | | 1.73 | 1.06 | 2.84 | | | | | | | | | | | | | |
| Unplanned pregnancy | | | | | | | 0.91 | 0.61 | 1.34 | | | | | | | | | | | | | |
| Less than 20 years at first pregnancy (vs. 20+ years) | | | | | | | 0.77 | 0.60 | 0.98 | | | | | | | | | | | | | |

| | | | | | | |
|--|------|------|------|------|------|------|
| Partner prevented woman from using contraception | 1.84 | 1.02 | 3.29 | 1.83 | 1.02 | 3.30 |
| Partner prevented woman from visiting antenatal care | 3.05 | 1.08 | 8.62 | 3.13 | 1.11 | 8.82 |
| HIV risk factors | | | | | | |
| Partner knows own HIV status (vs. partner does not know) | | | | 0.62 | 0.42 | 0.93 |

Table 5: Multiple logistic regression models showing factors associated with physical and/sexual violence and those associated with severe physical and/or sexual violence after adjusting for age, education, interview time, interviewer and past exposure to violence. N=2042. AOR= adjusted odds ratio; LCI=lower confidence interval; UCI= upper confidence interval.



Chapter Seven

PAPER III: INTIMATE PARTNER VIOLENCE (IPV) AFTER DISCLOSURE OF HIV TEST RESULTS AMONG PREGNANT WOMEN IN HARARE, ZIMBABWE

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Background: Intimate partner violence (IPV) has been under-examined in studies on HIV status disclosure. This study measured the prevalence of HIV disclosure and of IPV after disclosure to an intimate partner among women who tested for HIV during pregnancy in Harare. It also assessed factors associated with IPV after disclosing a positive HIV test.

Methods: We interviewed 2042 women who tested for HIV during pregnancy about HIV disclosure and IPV using an adapted WHO questionnaire. We assessed factors associated with IPV after disclosing HIV positive status using an ordered multiple logistic regression analysis.

Findings: 95.5% disclosed their HIV test results to their partners. Overall HIV prevalence was 15.3 %, but the prevalence among women who did not disclose was more than double (35.2%, 95% CI 25.0-45.4) the rate among women who disclosed to their partners (14.3%, 95% CI 12.6-15.8). 3.5% of women who tested negative did not disclose, but 10.7% of those testing positive did not disclose. 40.5% of HIV positive women reported physical, sexual and/or emotional IPV after disclosure, compared to 31.5% of women disclosing HIV negative results. HIV status was associated with women reporting negative reaction by partner after HIV disclosure (5.83 95%CI 4.31-7.89). Factors associated with higher levels of IPV after disclosing HIV positive status include couples living with the women's family members, gender inequity factors, forced first sexual intercourse, IPV before pregnancy, multiple sexual partners, woman independently deciding to become pregnant and being prevented from accessing antenatal care.

Conclusion: Our study demonstrates the relationships between IPV, HIV disclosure and gender inequality and points to the need to explore ways in which pregnant women in resource limited settings may be assisted in disclosing their status without further creating vulnerability.

Introduction

Encouraging HIV status disclosure dates back to the late 1980s'. It is rooted in the idea of partner notification (Kissinger, Niccolai *et al.* 2003) and has become a key strategy of HIV prevention (Simoni and Pantalone 2004). However, disclosure is a complex and gendered phenomenon and in high prevalence settings it is mainly women who test (Obermeyer and Osborn 2007), often during pregnancy, and who are expected to disclose to sexual partners. Given the strong evidence of the relationship between intimate partner violence (IPV) and gender inequity (Nebié, Meda *et al.* 2001, Jewkes 2010), disclosure may have unintended consequences such as the extension of IPV during pregnancy, particularly in relationships with previous abuse. The complexity of HIV disclosure and negative consequences after disclosure in Africa were reported in the early 1990's when antiretroviral drugs were not available in Africa (Temmerman, Ndinya-Achola *et al.* 1995). Qualitative research shows that disclosure is more than simply conveying medical information to a partner, and neither is the result interpreted in a vacuum: questions of trust, loyalty and faithfulness to a partner are integral to the disclosure process (Obermeyer, Baijal *et al.* 2011). Disclosure is therefore much more difficult for women in relationships where decisions are male dominated and it is not surprising that women struggle to make decisions about disclosure.

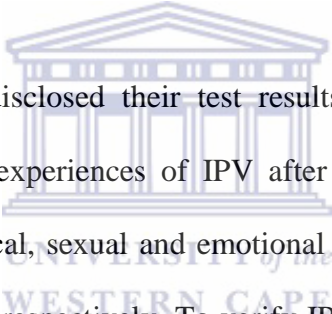
Research on HIV disclosure has been uneven, with several studies published in the early 2000's and then little research until very recently. African studies on outcomes of disclosure report contradicting results with some reporting positive outcomes including being accepted and receiving social support (Sigxashe, Baggaley *et al.* 2001, Issiaka, Cartoux *et al.* 2001, Nebié, Meda *et al.* 2001, Maman, Mbwambo *et al.* 2003), while others report negative outcomes such as stigma and discrimination (Kilewo, Massawe *et al.* 2001, Maman, Mbwambo *et al.* 2001b,

Gaillard, Melis *et al.* 2002, Medley, Garcia-Moreno *et al.* 2004). Studies that assessed negative outcomes did not specifically focus on IPV and little is therefore known about factors associated with experiencing IPV after disclosure. A global review conducted by Maman and colleagues also showed that although 26 out of 31 studies reported negative outcomes after disclosure, violence was not commonly reported and was most often poorly measured (Maman and Medley 2003). The only study conducted in Zimbabwe about outcomes of a disclosure process was on a non-random small sample of postnatal women in an urban setting (n = 221) and reported 8% women experiencing physical violence after disclosure (Chandisarewa, Stranix-Chibanda *et al.* 2007). Two reviews on disclosure rates and outcomes concluded that it was difficult to assess the extent of negative outcomes as there was often no data on the previous state of relationships (Medley, Garcia-Moreno *et al.* 2004, Obermeyer, Baijal *et al.* 2011). This is particularly relevant for IPV since it is important to determine if the HIV disclosure increases or decreases IPV, whether it is an extension of previous violence or if it is only associated with the HIV test. Many studies also did not separate outcomes by HIV status and the few that did so, showed contrasting results - in serodiscordant couples where the male test was negative or unknown IPV was more common (Were, Curran *et al.* 2011) while others did not find significant outcome differences between women who tested HIV positive and those who tested HIV negative (Maman, Mbwambo *et al.* 2003, Maman and Medley 2003).

HIV testing has become an integral part of ante-natal care in high HIV prevalence settings such as Zimbabwe. This paper presents prevalence of HIV disclosure to an intimate partner among HIV positive and HIV negative women during pregnancy as well as factors associated with IPV after disclosure of a positive HIV test result.

Methods

A cross sectional survey was conducted among 2 042 women attending either a 10-day or six-weeks postpartum clinic in six public postnatal clinics in low-income urban areas of Harare, Zimbabwe between May and September 2011. Women aged between 15 and 49 years who queued for postnatal care were conveniently recruited for face-to-face interviews in a private space in the local language (Shona) by trained female fieldworkers. Participants' HIV test results were obtained from antenatal clinic records. Determine rapid test (Abbott, Abbott Park, Ill) was conducted with positive results confirmed using Capillus while the Western blot used to resolve any conflicts. Respondents gave consent for their HIV results to be accessed.



Participants were asked if they disclosed their test results to their partners, how soon they disclosed, and were asked about experiences of IPV after disclosure using an adapted WHO questionnaire (WHO 2005). Physical, sexual and emotional IPV after disclosure were measured using six, three and four questions respectively. To verify IPV after disclosure, participants were asked about their partners' reactions after disclosing their status to their partners. The question had a wide range of negative responses including physical, sexual and emotional violence acts and positive responses including feeling happy and being supportive. Past IPV was measured by asking respondents about experiences of IPV in the 12 months before the pregnancy. Respondents were further asked about their experiences of child sexual abuse before age 15, their first experiences of sexual intercourse, age at 1st pregnancy, how decisions to become pregnant were made and lifetime number of sexual partners. Male partner violent behaviours were assessed by asking the respondent if her partner ever fought with another man since she partnered with him. Partner controlling behaviour (cronbach alpha 0.60) was measured using six behaviours used in

previous research (Dunkle, Jewkes *et al.* 2004) and a binary variable was created with zero to two behaviours described as none/low partner control and 3-6 behaviours representing high-level partner control. We also assessed how often the couple quarrelled using a three point (rarely, sometimes, often) likert scale.

Data Analysis

Data were analysed using Stata version 11 (StataCorp 2009). Prevalence of HIV and IPV forms (physical, sexual, emotional and combined forms) were calculated with 95% confidence interval (CI). We assessed IPV and HIV status and constructed an ordered variable, IPV, with never experienced abuse, a single type of IPV, two types and lastly three or more types representing higher frequency violence and used this as the outcome in the multivariate analysis of factors associated with IPV after disclosure of a positive HIV test result. After assessing candidate variables at the univariate level, an ordered multiple, stepwise logistic regression analysis was done adjusting for woman's age, education, past violence, time of testing for HIV status and time of interview. The regression model compared the effect of medium (2 types) to higher (3 or more types) with no or lower (1 type) IPV. Variables were entered in three stages, first with demographic factors, secondly with behavioural factors and lastly sexual and reproductive health factors. The final model was the best fit model with the lowest log likelihood ratio.

The ordered regression model assumes that the relationship between each pair of outcome groups, in this case, IPV type, is the same. This proportional odds assumption assumes that the odds ratios which describe the relationship between no violence and all other higher categories of violence (at least one IPV type) are similar to those that describe the next lowest IPV (one type) events and all

higher categories (2+ events). We tested the proportional odds assumption using two tests-likelihood ratio test ($p = 0.835$) and the Brant test ($p = 0.535$) and both tests were insignificant showing no violation of the proportional odds assumption. The association between partner's reaction after disclosure and HIV infection was tested in a logistic regression models controlling for past violence and demographic factors (age, education and marital status).

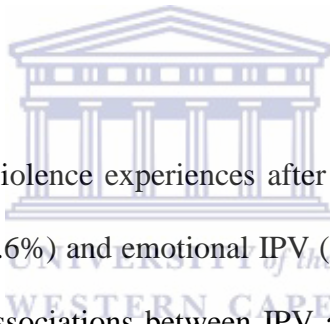
Ethics approval was obtained from the Medical Research Council of Zimbabwe and the University of the Western Cape. The study followed the WHO ethical guidelines for researching violence against women and girls (WHO 2001).

Findings

We approached 2 101 women and interviewed 2 042 giving a response rate of 97%. The overwhelming majority of women had HIV tests done and we retrieved results of 95.5% (N=1951) women. Among these, the majority disclosed their HIV test results (93.1%, N=1817) to their partners (Figure 1). Almost all women (97.2%) reported disclosing their results within three days of testing and receiving their results. Overall HIV prevalence was 15.3 % (Figure 1). The prevalence among women who did not disclose was more than double (35.2%, 95% CI 25.0-45.4) the prevalence among women who disclosed to their partners (14.3%, 95% CI 12.6-15.8). One in ten of the HIV positive women (10.7%) did not disclose compared to 3.5% of the HIV negative women ($p < 0.0001$). Overall, nearly a third of women who disclosed reported some form of abuse (32.8%) following the disclosure with higher rates among HIV positive women (40.5%) than among HIV negative women (31.5%) ($p = 0.004$). More HIV positive women who did not disclose

were abused (22.5% CI 7.3-27.7) compared to HIV negative women who did not disclose (22.5% CI 6.9-38.1) although the difference did not reach significance level. See Figure 1.

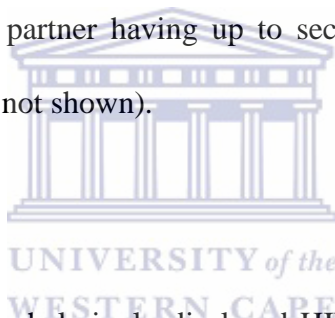
Table I shows the socio-demographic characteristics of the sample by HIV status and abuse experiences after disclosure. Statistical differences were found among the HIV positive group - abuse was less likely if women lived with partner's relatives or if she lived with her own family while the increased likelihood of violence was reported if no bride price was paid. Among the HIV negative women violence after disclosure was significantly less likely if a woman or her partner had secondary level education, if she lived with her or partner's family and if bride price payments were made.



The details on the prevalence of violence experiences after disclosure are presented in Table 2. Overall higher levels of sexual (22.6%) and emotional IPV (18%) than physical IPV (5.8%) were reported after disclosure. Strong associations between IPV after disclosure and HIV status were found for most types of IPV except for sexual violence and IPV in the last 12 months before the pregnancy (See Table 2).

Table 3 shows results from the ordered multiple logistic regression model. The odds of experiencing medium to higher frequency IPV after disclosure of HIV positive test result were higher in women who experienced controlling behaviours, whose partners had more than one wife and whose partner quarrelled frequently. There were also strong associations between IPV after disclosure and experiencing IPV in last 12 months before pregnancy, forced first sexual intercourse, teenage pregnancy or having a partner who had previously been involved in fighting

with other men. Women who reported independent decisions to become pregnant experienced higher odds of medium to higher frequency violence, while those who reported being encouraged to attend antenatal care had lower odds of reporting such violence. However, women who had three or more lifetime sexual partners and couples who lived with natal family had less likelihood of reporting experiencing medium to higher frequency IPV. HIV positive women had greater odds (5.83 95%CI 4.31-7.89) of reporting a negative reaction (23.74%) (sexual, emotional and physical violence) from the partner after they disclosed their results to their partners. Other factors that were associated with the partner's negative reactions towards the woman after disclosure include partner having other wives (AOR1.59 95%CI 1.16-2.18), living with partner's family members (AOR1.54 95%CI 1.18-2.01) and partner having up to secondary education only (vs. tertiary) (AOR1.60 95%CI 1.08-2.37) (data not shown).



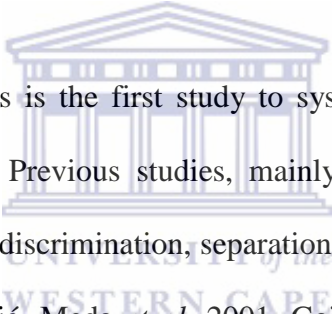
Discussion

Our study shows that women overwhelmingly disclosed HIV results to partners and the rate of 93% among pregnant women is one of the highest ever recorded in the world. We also found disclosure was higher among HIV negative women. A review of HIV disclosure studies (Obermeyer, Bajjal *et al.* 2011) reported disclosure rates ranging between 17% and 92%, of which the lowest figures came from African studies (n=12 studies) while US studies (n=9 studies) reported the highest. Our study therefore illustrates a huge milestone in the steps towards HIV prevention since disclosure facilitates prevention of HIV infections especially in sero-discordant couples. Our results challenge Obermeyer and colleagues' conclusion that higher disclosure rates are more likely among high-income countries where institutional support for HIV positive women is higher and Medley, Garcia-Moreno *et al.* (2004)'s finding that disclosure tends to be higher

among stand-alone voluntary counselling and testing centres than in antenatal care programmes. Our results dispute notions that those who disclosed had higher institutional support as antiretroviral therapy coverage in Zimbabwe is still far from sufficiently covering all who need it. Higher disclosure in our study could be a result of a decade-long HIV prevention campaign (Halperin, Mugurungi *et al.* 2011) that emphasized male participation in HIV prevention programmes including in antenatal care. We found disclosure rates which are similar to what was found (88%) previously among urban postnatal attendees in Zimbabwe (Chandisarewa, Stranix-Chibanda *et al.* 2007). In terms of socio-demographic characteristics studies report that disclosure is higher in urban areas (Norman, Chopra *et al.* 2007), among educated women (Obermeyer, Baijal *et al.* 2011) and women who are economically dependent on their male partners (Kissinger, Niccolai *et al.* 2003). These factors may help to explain our higher levels of disclosure since our sample was based on urban women, most of them (93%) having at least 11 years of formal education, although unemployed. However, we do not have similar socio-demographic detail in the associations as we controlled for these factors.

In agreement with previous studies (Maman, Mbwambo *et al.* 2003, Jasseron, Mandelbrot *et al.* 2011, Obermeyer, Baijal *et al.* 2011) we found that women were less likely to disclose their results if they tested positive (Unadjusted Odds Ratio [UOR] 0.30, 0.19-0.48). This supports the findings from the two reviews where the fear of negative effects was identified as an important barrier to disclosure (Medley, Garcia-Moreno *et al.* 2004, Obermeyer, Baijal *et al.* 2011). Such a barrier may also lead to some women delaying or not enrolling for treatment as they do not have support from their partners. During the formative research for this study we found that women feared disclosure as an HIV positive status would be interpreted as being labelled a sex-worker

(Shamu, Abrahams *et al.* 2012). Women fear being stigmatized or discriminated against after disclosing their HIV status. Our sample had very high rates of past IPV which could also explain why HIV positive women feared disclosing their results. About two thirds of the women who disclosed in a study in South Africa (Varga, Sherman *et al.* 2006) and India (Chandra, Deepthivarma *et al.* 2003) indicated that they were coerced to disclose or someone such as a nurse disclosed on their behalf. This further highlights the difficulties, such as fear of divorce, violence, stigma and discrimination that HIV positive women face with respect to disclosure. Although in our study women reported self-disclosure we do not know if disclosure was facilitated or coerced by health workers.



To the best of our knowledge, this is the first study to systematically measure IPV after HIV disclosure to an intimate partner. Previous studies, mainly qualitative, only showed negative outcomes such as disputes, stigma, discrimination, separation, abandonment or being chased away (Issiaka, Cartoux *et al.* 2001, Nebié, Meda *et al.* 2001, Gaillard, Melis *et al.* 2002) and where violence was mentioned, there was no systematic measurement used to define it and sexual and emotional violence were generally ignored (Maman and Medley 2003). Although direct comparisons cannot be made because of different IPV measurements we reported 5.8% physical violence which is within the range (3.5%-14.6%) of women reporting a “violent reaction” from a partner reported in a global review (Medley, Garcia-Moreno *et al.* 2004) and a non-random study in Zimbabwe which found 8% reported some form of physical violence after disclosure (Chandisarewa, Stranix-Chibanda *et al.* 2007). However, our definition of negative reactions which encompasses many acts including psychological, sexual and physical violence was far higher (23.74%) than reported by Medley, Garcia-Moreno *et al.* (2004). The strong association

between HIV status and negative reactions help us to further understand the difficulties that women face when disclosing their status. HIV testing and counselling programmes must find ways to reduce women being abused after disclosure. The high level of sexual violence is not surprising given what was reported in the formative qualitative research with women reporting sexual violence as the most common form of abuse during pregnancy (Shamu, Abrahams *et al.* 2012).

Our results show that unequal gender power relations is a strong predictor of IPV after HIV disclosure and support results from studies of IPV in general (Jewkes 2010). This is illustrated in positive associations between IPV and women deciding to become pregnant without their partners' explicit approval, being prevented from visiting antenatal care and experiencing male partner controlling behaviours. In addition, early experiences of gendered abuse was shown in experiences of first sexual intercourse being forced and having first pregnancy while still a teenager. Previous studies have also reported difficulties using contraception and safe sexual practices among abused women due to male control (Tsai and Subramanian 2012). However, the protective effect of women's previous multiple sexual partnering could be that women who had more partners in the past were more assertive and empowered to deal with disclosure and potential abuse and male partners possibly knew and accepted their past sexual history or may even have suspected their status.

The finding that living with a member of women's natal family in a couple's household was protective against violence provides insight into the traditional respect for in-laws by the son-in-law who seemingly finds it difficult to abuse a wife in the presence of her relatives. The finding that presence of the woman's relatives is protective, supports previous studies where the presence

of other people to support the woman was associated with a decline in IPV (Muhajarine and D'Arcy 1999, Farid, Saleem *et al.* 2008). This illustrates the centrality of the natal family in providing social support which may help to limit violence.

The study has limitations. We asked women a general question about abuse after disclosing HIV status. We could have asked whether participants perceived the violence as directly related to the disclosure or whether violence is a normative part of their lives with their partner. Violence could also have been a result of just merely testing for HIV without partner's consent since 31.5% of participants who tested negative also reported abuse. There could be other reasons that triggered the violence but it is likely that most motivations are rooted in male domination given the normative gender roles and men's belief that they have a right to discipline women. The high rates of IPV may also have little to do with the disclosure even if disclosure was a trigger. The HIV status of the male partners was also not known and such knowledge is important to compare results of abuse by serostatus concordancy or discordancy. The other limitation is that of possible confounding in the measurement of IPV after disclosure because violence after disclosure may be closely linked to the generally high levels of violence reported in the study.

Our study demonstrates the interconnectedness of IPV, HIV and women's status and points to the need to explore ways in which pregnant women in resource-poor settings may be assisted in disclosing their status without further creating vulnerability. Promoting HIV disclosure will remain a core component of HIV prevention and more attention should be given to the consequences and gendered nature of disclosure.

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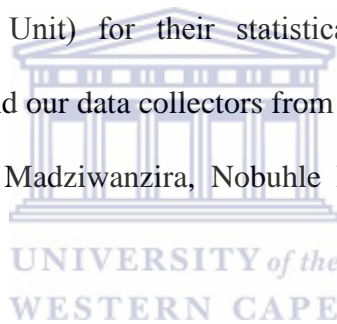


Figure 1: Prevalence of Intimate partner violence after testing and disclosing HIV status to a partner (%)

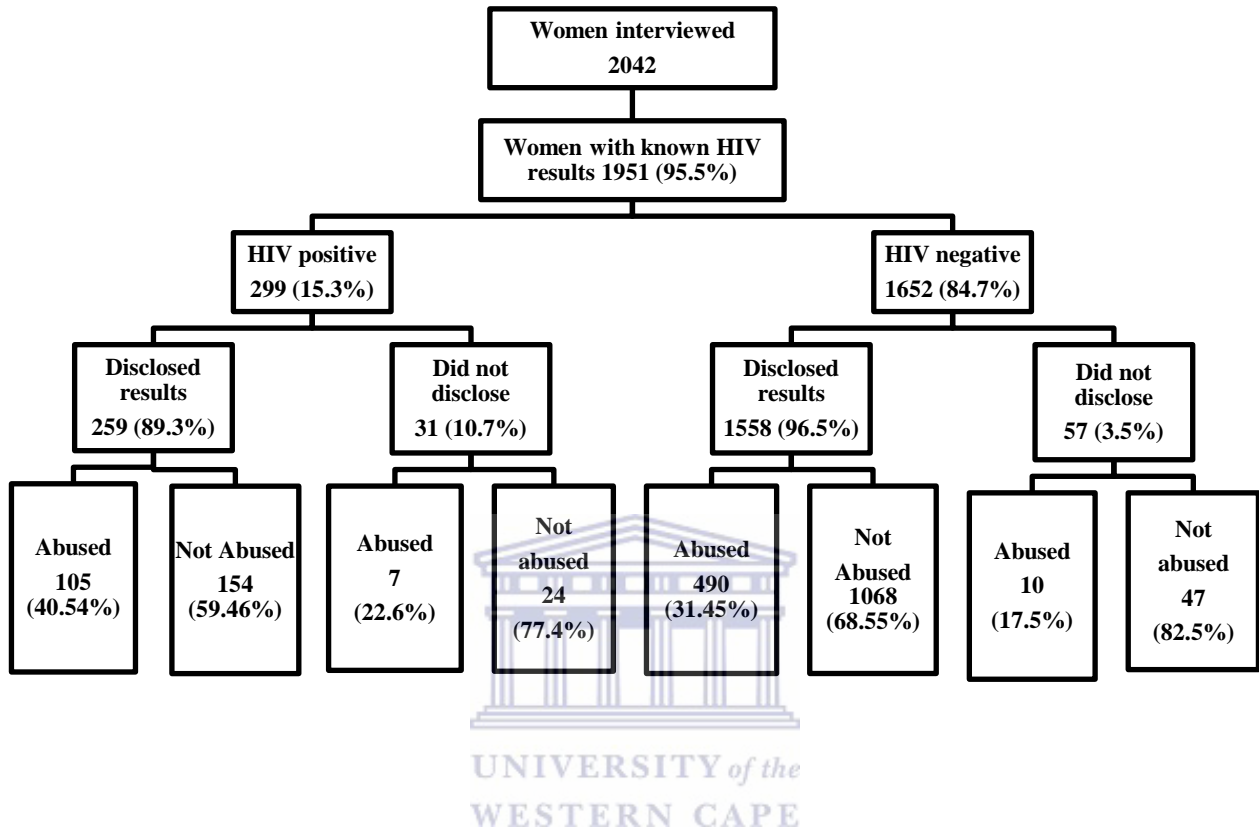


Table 1: Socio-demographic characteristics of women by HIV status and experiences of physical, sexual and/or emotional intimate partner violence after disclosing of status N= 1817

| Variable | HIV Positive N=259 | | | p-value | HIV negative N=1558 | | | p-value |
|--|--------------------|------------|-----------|---------|---------------------|--------------|------------|---------|
| | Totals (%) | Not abused | Abused | | Totals (%) | Not abused | Abused | |
| Woman's age | | | | | | | | |
| 15-24 | 88 (34.0) | 51(33.1) | 37 (35.2) | | 717(46.1) | 505(47.5) | 212(43.3) | |
| 25-49 | 171(66.0) | 103 (66.9) | 68 (64.8) | 0.723 | 837 (53.9) | 559 (52.5) | 278 (56.7) | 0.123 |
| Marital status | | | | | | | | |
| Married | 223 (86.1) | 133 (86.4) | 90 (85.7) | | 1430 (91.8) | 979(91.8) | 451(92.0) | |
| Not married | 36 (13.9) | 21(13.64) | 15(14.3) | 0.882 | 127 (8.2) | 88(8.2) | 39(8.0) | 0.847 |
| Women's Employment | | | | | | | | |
| Not employed | 175 (68.4) | 103 (67.8) | 72 (69.2) | | 1085 (70.0) | 756 (71.2) | 329 (67.1) | |
| Employed | 81 (31.6) | 49 (32.2) | 32(30.8) | 0.804 | 466 (30.0) | 305(28.8) | 161(32.9) | 0.101 |
| Women's Education | | | | | | | | |
| Primary | 28 (10.9) | 19(12.3) | 9(8.7) | | 101 (6.5) | 57(5.3) | 44(9.0) | |
| Sec & Tertiary | 230 (89.1) | 135(87.7) | 95(91.4) | 0.351 | 1454 (93.5) | 1008(94.7) | 446(91.0) | 0.007 |
| Living with partner family member/s | | | | | | | | |
| Yes | 155(61.0) | 102(66.7) | 53(52.5) | 0.023 | 1021 (66.5) | 761(72.0) | 260(54.4) | |
| No | 99 (39.0) | 51(33.3) | 48(47.5) | | 514 (33.5) | 296(28.0) | 218(45.6) | 0.000 |
| Living with own family member/s | | | | | | | | |
| Yes | 101 (39.9) | 71(46.7) | 30(29.7) | 0.007 | 628 (41.0) | 472(44.8) | 156(32.7) | 0.000 |
| No | 152 (60.1) | 81(53.3) | 71(70.3) | | 902 (59.0) | 581(55.2) | 321(67.3) | |
| Partner's age | | | | | | | | |
| 18-29 | 90 (35.0) | 59(36.6) | 34(32.7) | | 729 (46.9) | 513 (48.0) | 216(44.3) | |
| 30+ | 167 (65.0) | 97(63.4) | 70(67.3) | 0.519 | 826 (53.1) | 555(52.0) | 271(55.7) | 0.177 |
| Partner's education | | | | | | | | |
| Secondary | 234 (91.4) | 143(93.5) | 91(88.3) | | 1311 (84.7) | 940(88.7) | 371(76.2) | |
| Tertiary | 22 (8.6) | 10(6.5) | 12(11.7) | 0.152 | 236 (15.3) | 120(11.3) | 116(23.8) | 0.000 |
| Partner has other wives | | | | | | | | |
| Yes | 80 (31.8) | 42(27.6) | 38(38.0) | | 1349 (87.5) | 125(11.8) | 61(12.8) | |
| No | 172(68.2) | 110(72.4) | 62(62.0) | 0.084 | 145 (12.5) | 933(88.2) | 416(87.2) | 0.589 |
| Bride price payment | | | | | | | | |
| All paid | 14(5.5) | 14(9.2) | 0(0.00) | | 163 (10.6) | 140(13.2) | 23(4.8) | |
| Partly paid | 177 (69.7) | 103(67.3) | 74(73.3) | | 1121 (73.0) | 736(69.8) | 385(80.2) | |
| Nothing paid | 63 (24.8) | 36(23.5) | 27(26.7) | 0.007 | 251(16.4) | 179(16.7) | 72(15.0) | 0.000 |
| Lifetime sexual partners | | | | | | | | |
| 1-2 sexual partners | 217 (83.8) | 130 (84.4) | 87 (82.9) | | 1,503(96.72) | 1,039(97.56) | 464(94.89) | |
| 3+ sexual partners | 42 (16.2) | 24 (15.6) | 18(17.1) | 0.738 | 51(3.28) | 26(2.44) | 25(5.11) | 0.006 |

Table 2: Prevalence of intimate partner violence after HIV disclosure and crude association with HIV. N=1817

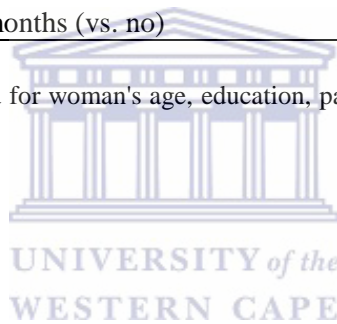
| Type of violence | Frequency (abused/N) | Prevalence (confidence interval) | % Crude association with HIV - Crude Odds Ratios | p-value |
|---|---------------------------------|---|---|----------------|
| Emotional violence | 329/1817 | 18.1 (16.3-19.8) | 1.94 (1.43-2.63) | <0.0001 |
| Physical violence | 106/1817 | 5.8 (4.7-6.9) | 2.06 (1.29-3.27) | 0.002 |
| Sexual violence | 411/1817 | 22.6 (20.69-22.54) | 1.23 (0.9-1.66) | 0.178 |
| Physical and /or sexual violence | 459/1817 | 26.3 (23.2-27.2) | 1.27 (0.95-1.7) | 0.103 |
| Sexual and/emotional violence | 634/1817 | 32.03 (29.9-34.2) | 1.51 (1.15-1.98) | 0.003 |
| Physical and/or emotional | 354/1817 | 19.5 (17.7-21.3) | 1.91 (1.42-2.57) | <0.0001 |
| Physical, emotional and/or sexual violence | 595/1817 | 32.8 (30.5-34.9) | 1.48 (1.13-1.94) | 0.004 |
| Past violence | | | | |
| Child sexual abuse | 153/1808 | 8.46 (7.17-9.74) | 1.89 (1.26-2.83) | 0.002 |
| IPV in last 12 months before pregnancy | 1101/1817 | 60.5 (58.3-62.8) | 1.10 (0.83-1.44) | 0.487 |



Table 3: Ordered multiple regression analysis showing factors associated with experiencing IPV (physical, sexual and/or emotional) after disclosing HIV positive status* N=259

| Variables | Adjusted Odds Ratio | 95% CI | p-value |
|---|----------------------------|---------------|----------------|
| Partner has 2+ wives (vs. one) | 2.11 | 1.06-4.18 | 0.032 |
| Couple lives with woman's family members (vs. no) | 0.39 | 0.19-0.78 | 0.008 |
| Experiencing 3-6 controlling behaviours (vs. 0-2) | 2.03 | 1.00-4.12 | 0.047 |
| Couple quarrels frequently (vs. rarely) | 2.18 | 1.10-4.34 | 0.026 |
| Partner ever fought with another man (vs. no fighting) | 3.18 | 1.49-6.75 | 0.003 |
| Forced first sexual intercourse (vs. willing first sex) | 2.37 | 1.18-4.75 | 0.015 |
| Woman encouraged to visit antenatal care (vs. stopped) | 0.01 | 0.00-0.18 | 0.002 |
| Woman had 3+ total sexual life partners (vs. <3) | 0.28 | 0.11-0.67 | 0.005 |
| Woman was under 20 at first pregnancy (vs. >20) | 2.14 | 1.11-4.12 | 0.023 |
| Pregnancy decision was done independently by woman (vs. both) | 3.48 | 1.00-12.14 | 0.05 |
| Experienced violence in the last 12 months (vs. no) | 9.94 | 4.16-23.73 | <0.00001 |

*The ordered regression model controlled for woman's age, education, past experience of violence, time of HIV test, time of interview. CI= confidence interval

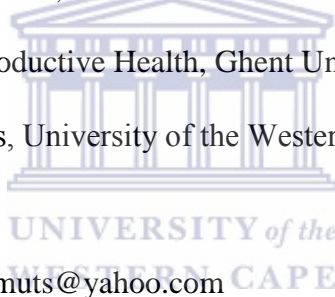


Chapter Eight

PAPER IV: “THAT PREGNANCY CAN BRING NOISE INTO THE FAMILY”: EXPLORING INTIMATE PARTNER SEXUAL VIOLENCE DURING PREGNANCY IN THE CONTEXT OF HIV IN ZIMBABWE

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ABSTRACT

Background: Globally, studies report a high prevalence of intimate partner sexual violence (IPSV) and an association with HIV infection. Despite the criminalisation of IPSV and deliberate sexual HIV infection in Zimbabwe, IPSV remains common. This study explored women's and health workers' perspectives and experiences of sexuality and sexual violence in pregnancy, including in relation to HIV testing.

Methods: This qualitative study was part of a larger study of the dynamics of intimate partner violence and HIV in pregnancy in Zimbabwe. Key informant interviews were conducted with health workers and focus group discussions were held with 64 pregnant or nursing mothers attending antenatal and postnatal care clinics in low-income neighbourhoods of Harare, covering the major thematic areas of validated sexual violence research instruments. Thematic content analysis of audio-recorded and transcribed data was conducted.

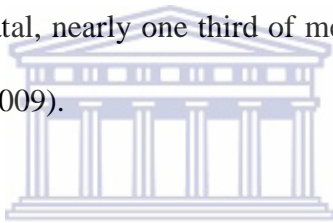
Results: While women reported some positive experiences of sex in pregnancy, most participants commonly experienced coercive sexual practices. They reported that men failed to understand, or refused to accept, pregnancy and its associated emotional changes, and often forced painful and degrading sexual acts on them, usually while the men were under the influence of alcohol or illicit drugs. Men often refused or delayed HIV testing, and participants reported accounts of HIV-positive men not disclosing their status to their partners and deliberately infecting or attempting to infect them. Women's passive acceptance of sexual violence was influenced by advice they received from other females to subordinate to their partners and to not deprive men of their conjugal sexual rights.

Conclusions: Cultural and societal factors, unequal gender norms and practices, women's economic vulnerability, and men's failure to understand pregnancy and emotional changes, influence men to perpetrate IPSV, leading to high risk of HIV infection.



Introduction

Gender-based violence in general, including coercive sexual practices, is widely understood as an expression of male control and domination over women (Heise 2002, Jewkes 2002, Dunkle, Jewkes *et al.* 2004). Although non-consensual sex both in marriage and dating relationships is common, it is believed to be under-reported (Jewkes and Abrahams 2002). Nevertheless, research conducted to understand unsafe and inequitable sexual relationships in the light of the high rate of HIV shows that coercive sexual practices, from more subtle forms to physical rape, are endemic in heterosexual intimate relationships in southern Africa (Wood and Jewkes 1998, Clowes, Shefer *et al.* 2009, Shefer, Strebel *et al.* 2009). In South Africa, for example, in a 2008 study conducted in the Eastern Cape and KwaZulu-Natal, nearly one third of men (28%) admitted to having raped a woman (Jewkes, Sikweyiya *et al.* 2009).



One of the challenges of studying IPV is the definition of sexual violence, which includes a spectrum of actions that vary from non-physical persuasive language to the use of physical force (Wood, Lambert *et al.* 2007). Definitions of sexual violence in southern Africa include: penetrative sex without the partner's agreement, enacted by means of verbal pressure or physical force which may include emotional manipulation, threat, trickery, verbal persistence or not taking 'no' for an answer; being locked in a room; and being physically assaulted (Jewkes, Pen-Kekana *et al.* 2001, Koenig, Zablotska *et al.* 2004, Jewkes, Dunkle *et al.* 2006, Wood, Lambert *et al.* 2007). Njovana and Watts (1996) include forced pregnancy as another dimension of sexual abuse in their study in Zimbabwe. In South Africa, young women report 'giving in' to male pressure for sex because of 'love', commitment and fear of losing the relationship (Wood, Lambert *et al.* 2005, Reddy and Dunne 2007, Shefer, Crowford *et al.* 2008).

In most southern African countries, rape has been redefined from the limited common law definition whereby it consists of only penal-vaginal sexual intercourse without a woman's consent (Stesyfin 2008) to also include acts of non-consensual sexual penetration with the penis, finger or object into the vagina, anus, or mouth of another person; and other non-penetrative sexual acts against one's will. This study acknowledges the continuum of violence and the importance of humiliation, degradation and violation of a woman's sexual integrity. More subtle, non-physical forms of coercion in which a partner consents to sex when they do not want it, due to power inequalities and normative roles and practices, are also viewed as sexual violence.

Njovana and Watts (1996) and Osirim (Osirim 2002) argue that in Zimbabwe, the Shona culture and the economic downturn respectively, have perpetuated unequal gender relations that increase the risk of IPV. Regarding gender socialisation and Shona culture, Kambarami (2006) argues that at puberty, girls are taught how to please their future husbands as well as to be gentle, submissive and obedient wives. This furthers gender inequality that arguably perpetuates intimate partner sexual violence (Shefer 2009).

Gender discrimination and female subordination in Zimbabwe is historical and was strengthened by colonial administrative policies which subordinated women. The colonial period saw the codification of customary practices into a rigid draconian law that discriminated against women, including officialising male control over women's sexuality. For example, the authority over a single woman's sexuality, sexual and fertility rights was transferred from fathers and brothers to husbands upon marriage, hence putting a woman's lifetime under the control and subordination of men (Osirim 2002, Chirawu 2006). In addition, the influence of the marriage institution and the

church is also viewed as encouraging male domination of female sexuality. It is in this broader environment of male domination of female sexuality, sexual and fertility rights that women continue to experience sexual violence in partnerships. Although some policies against gender inequality and violence such as the Domestic Violence Act and Sexual Offences Act have been instituted in the post-independence period, implementation of these policies has not been adequate.

The last decade has been marked by an increasing acknowledgement of the role of normative gender roles and power inequalities in HIV/AIDS (Shefer 2009) and exploring the interconnections between gender-based-violence (particularly inequitable and coercive sexual practices) and HIV infection (Dunkle, Jewkes *et al.* 2004, WHO 2005, Pronyk, Kim *et al.* 2008). Zimbabwe is one of the few countries in the world that has criminalised marital rape in the context of HIV infection (Sexual Offences Act 2001, Stesyfin 2008). The law also gives women the power to seek protection orders against their violent partners. Despite this, up to a quarter of Zimbabwean women of child-bearing age report sexual abuse, with most (65%) of the abuse taking place in intimate relationships, and at least 8% occurring during pregnancy (Watts, Keough *et al.* 1998, Chandisarewa, Stranix-Chibanda *et al.* 2007, CSO and Macro 2007). Although the criminalisation of marital rape has been operational since 2001, Chirawu (Chirawu 2006) avers that, up until 2006, no person had been prosecuted for marital rape. Under-reporting of domestic violence has been widely noted in South Africa with respect to both formal police record-keeping and in epidemiological studies (Jewkes and Abrahams 2002). Research with the Musasa, a non-governmental organisation working against gender-based-violence in Zimbabwe, showed that it took some women up to 10 years to seek help after the abuse (Njovana and Watts 1996).

Sexual violence or rape during pregnancy has not attracted as much research in Africa as elsewhere in the world. Many studies subsume reports of its prevalence and effects under the broad term of ‘physical violence’. The prevalence of sexual violence during pregnancy in Africa was reported in a systematic review, to range from 2.7% to 26,5% (Shamu, Abrahams *et al.* 2011). The protective effect of pregnancy on coercive sexual practices has been recorded in both western and non-western societies, although at different reporting periods. In China for instance, the prevalence of coercive sexual practices declined from 5.8% in the 12 months before pregnancy to 2.8% during pregnancy, before it rose again to 4.9% after pregnancy (Guo, Wu *et al.* 2004). In Belgium, coercive sex was higher (0.9%) in the 12 months before pregnancy and lowered significantly (0.2%) during pregnancy (Roelens, Verstraelen, *et al.* 2008). Most of these studies were conducted in low HIV prevalence communities; the situation could be different in Zimbabwe where HIV prevalence is one of the highest in the world. Women who test for HIV and seek HIV preventive mechanisms such as condom use may experience coercive and unprotected sex from their partners who question the idea of using condoms in marriages.

Since the enactment of laws in Zimbabwe against partner rape and deliberate STD/HIV infection in intimate relationships, there has not been a dedicated study to explore current experiences of sexual violence. HIV testing among antenatal care attendees in Zimbabwe shifted from a patient-initiated model based on the “opt-in” approach to a provider-initiated testing and counselling model in which all antenatal care attendees are invited to test and only those who “opt out” will not be tested (Chandisarewa, Stranix-Chibanda *et al.* 2007). This model, sometimes known as the “opt-out” approach, has significantly increased HIV testing coverage from 65% to 99.9%

(Chandisarewa, Stranix-Chibanda *et al.* 2007). These changes in policy related to partner rape and HIV testing in public health facilities are both important to assess in their own right, and provide a framework within which to assess and interpret intimate partner sexual violence (IPSV) and how it intersects with HIV. There is a need to provide an in-depth understanding of the HIV risk factors that are increasingly documented – but with little contextualisation - in quantitative research. The aim of this study was to explore participants’ experiences of IPSV during pregnancy, including after HIV testing, with a particular focus on how such violence may interlink with HIV infection.

Methods

A qualitative study on IPSV during pregnancy and HIV testing was conducted using focus group discussions (FGDs) involving pregnant and nursing mothers and in-depth interviews with health workers. Qualitative thematic analysis was used to develop a theoretical understanding of sexual violence experiences during pregnancy and their coexistence with HIV infection, testing and disclosure. Data were collected at six public primary health care facilities (pre and post-natal) in low-income high density residential suburbs in Harare, in April and May 2010. This exploratory study informs a larger mixed method study of the prevalence and dynamics of IPSV and HIV in pregnancy, aimed at developing interventions with health workers, women and men against IPSV.

Ethics: The study was conducted following the WHO Guidelines on researching violence against women (WHO 2001). The Medical Research Council of Zimbabwe and the University of the Western Cape ethics committees approved the study. Permission to conduct the study was granted by the Harare City Health Directorate. All study participants were given full information about the

research and its aims. All participants voluntarily gave their written consent to participate in the study. Participants were assured that they could leave the research at any time. Confidentiality and anonymity were maintained by asking participants not to mention their names or disclose their HIV status during focus group discussions.

Focus group discussions (FGDs)

Seven FGDs were held in Shona with 64 women at six public health facilities. Four FGDs involved pregnant women attending second or third trimester antenatal care (ANC) clinics and three were held with nursing mothers attending postnatal care (PNC). All women were reported to have tested for HIV during their initial ANC visits through the provider initiated HIV testing and counselling (PITC), although we did not independently verify their individual test results.

Pregnant and nursing mothers were aged between 18 and 38 years old. Most were not formally employed. Almost all reached or had completed 11 years of formal education. Half were either carrying their first pregnancy or had one child. The highest number of pregnancies a participant had ever had was four. Almost all reported that they were currently married or cohabiting.

FGDs, led by a researcher and a trained research assistant, lasted 1 to 1½ hours. All were audio recorded and field notes were also taken. The FGD Guide covered the major thematic areas contained in the validated sexual violence research instruments designed by the WHO (2005) which are being used in the broader study.

The initial questions focused on women's household chores, planning in the household, and likes and dislikes during pregnancy. The discussions eventually progressed into the more sensitive issues of sexual violence and HIV. To enable open discussion, participants were invited to narrate their experiences as stories about other people or 'someone I know' and not to feel obliged to disclose their own personal experiences. This technique of disclosing sensitive personal information in third person was used in a sensitive study of HIV and risky sexual practices among young female university students in South Africa (Shefer, Strebel *et al.* 2012). Our use of this technique helped to increase rapport and disclosure of sensitive sexual violence experiences which would not have been shared as personal experiences.

Interviews with health workers

Seven key informant interviews were conducted with health workers (six nurse midwives and one HIV testing nurse) at six facilities. These face-to-face open-ended interviews were held privately with participants in English by a fluently bilingual (English-Shona) researcher, but participants often switched to Shona (the local language) when quoting verbatim from their recollections of encounters with abused women or around disclosure issues since nurses communicate with clients in Shona and not in English. Data were captured by audio recording and written notes. The information collected from health workers was then cross-checked with that collected from FGDs, to understand the organisation and impact of antenatal and postnatal care, provider-initiated HIV counselling and testing, and disclosure of HIV results.

Data analysis

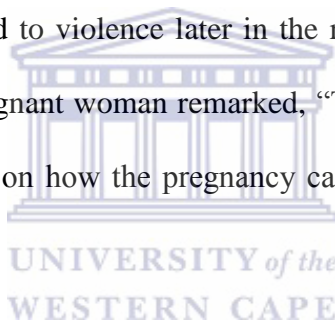
Audio recorded data was transcribed verbatim and vernacular text was translated to English – translations were checked for accuracy, consistency and validity. Information from field notes was also cross-checked with information from the tapes before coding. All scripts were loaded into OpenCode qualitative software to organise the data into codes and categories. During this process, transcripts were repeatedly read and codes constructed based on the research objectives. Common themes were formed and new codes formulated as themes emerged. We systematically followed this process of coding and categorizing the data under themes presented in the findings section until we were satisfied that all data that fit the themes were relevantly coded. Thematic content analysis was used to analyse the data in each theme. We assessed the content and meaning of the information in each theme in line with the study objectives as well as findings from other studies. While the concept of analytic induction was used to examine similarities between information from FGD participants and that from health workers, differences were also noted. The findings section below presents each theme.

Findings

The first significant finding was that all participants discussed the issues openly and both health workers and participants reported coercive or violent sex during pregnancy as commonplace yet complex. Results are presented by first describing social norms around pregnancy. Next norms relating to sexual relations in marriage are outlined. Coercive sexual practices that participants reported are then described, as well as reports of positive and pleasurable sexual experiences. Finally, we report how respondents discussed the issue of sexual relations around the time of HIV testing and disclosure.

A. Social norms around pregnancy and expectations of child-bearing

Participants reported that women have less decision-making power than their partners concerning their reproductive health and when to fall pregnant. Many first pregnancies were not planned and this was viewed as a facilitative factor in partner conflict and violence during pregnancy. For example, some young men raped their partners during dating, and these women later became their wives. Participants reported how date rape with the intention of impregnating a girl was carried out if the girl refused a marriage offer, and was generally perpetrated by poorer men who lacked the money for bride wealth. According to both FGD participants and key informants, these unintended pregnancies usually led to violence later in the relationship, with some relationships ending during pregnancy. One pregnant woman remarked, “That pregnancy may bring noise into the family...I think it all depends on how the pregnancy came about.” (FGD Pregnant Women, Facility D).



Participants also reported a widespread practice of family control over their reproduction, with relatives, especially from the man’s side, compelling the woman to have a baby:

“Some mothers are pressured by their parents but most of the time the pressure comes from the men’s side. They will start saying that you did not come here [to our family] to eat [but rather you have a duty to bear children for the family]. You notice how they [in-laws] speak, that they now want you to have another child.” (FGD Pregnant Women, Facility F).

At times, for fear of being accused of intervening in a couple’s private life, in-laws and aunts “speak in riddles and parables” telling the daughter-in-law to become pregnant. In the case of those with children already, in-laws “may take their [the couple’s] last baby to their rural area which traditionally means the child is disturbing them from having another baby” or may come to town saying, “they wanted to be spoiled” by their son who does not have a child. A few

participants reported how in-laws and aunts directly advised a newly-married wife to become pregnant lest she be accused of barrenness.

B. Norms relating to marital sexual relations

Another key finding was the importance of norms relating to marital sexual relations. Women got advice about sexual intercourse during pregnancy from many sources. Tradition and the institution of marriage emerged as major factors impacting on a pregnant woman's capacity to resist sexual violence and for men to justify their perpetration thereof. Despite not agreeing to have sex, women reported that they had sex to please their partners according to tradition. One woman in a FGD at Facility B mentioned that, "When you are married you shouldn't refuse [sex]". Another said, "... in our tradition it's not possible [to deny him sex]. You must just pretend you are enjoying it by making the necessary noise in bed". To these women, sex was a matter of fulfilling the traditional role of being wife, which dictates that a man has rights over the sexuality of his wife. If she refuses sex she could be punished bitterly, for example, by being chased away from home. As one woman narrated, "Yes he will tell you that it's his right and it's his house. He will tell you to get down from the bed. If you get down he will tell you to leave his house. So you will see that if you go out it will be difficult to come back. Therefore, you end up doing it because you would have been forced." (FGD Pregnant Women, Facility E).

For many women, saving a marriage by observing a husband/partner's demands was an important aspect of womanhood. At Facility D, one older woman reprimanded a young expecting mother, saying, "Sometimes we just have to understand and try and save our marriages. You may have sex once or twice per week to protect your marriage. We cannot encourage each other such bad habits

of refusing sex. I do not think it is a good idea.”(FGD Pregnant Women, Facility D). The younger women disagreed, while the older women supported this view.

The practice of paying bride-price in Zimbabwe also facilitates the domination of female sexuality by husbands as anthropologists argue that bride-price transfers control of female sexuality from a woman’s family of origin to her husband during marriage (Watts, Keough *et al* 1998, Chirawu 2006, Kambarami 2006). In a FGD at Facility E, women overwhelmingly highlighted bride-price as a major contributor to forced sex. They interpreted bride-price as giving a married man unlimited access to sexual intercourse with his wife, making it difficult for women to refuse sex. The following extract shows how men also reportedly take advantage of bride-price to demand sex:



Respondent 1: Some men will just hide behind the fact that ‘I married you’ and when I am pregnant (interruption: Yes! All agreeing) so I end up doing it. He shouldn’t be denied.

Respondent 2: This issue of lobola (bride-price)! (interjected by laughter)

Respondent 3: This issue of lobola saying “I paid for you!”

(FGD Pregnant Women, Facility E).

Participants reported that aunties advised women not to refuse their partners’ sex, and thus played a major role in reinforcing women’s inferior position: “They tell you not to deny him. If he becomes promiscuous [because you denied him sex] it will stress you more. So you end up forcing yourself to do it. You will pretend as if you like it.” (FGD PNC Women, Facility A).

The reinforcement of women's submission to men's sexual demands extends well beyond contexts obviously and directly related to marital sexuality. Influence from broad-based social institutions, such as the church and the clinic, was also cited as manipulating women to tolerate forced sex. The role of health workers should not be underestimated. Pregnant women were counselled that they should not refuse or resist sex until they delivered, and they appeared to take this advice quite seriously. One woman explained how, during the health education talks at the antenatal clinic, the tradition of not refusing your husband sex under any circumstances was reinforced:

“We came yesterday and the nurses taught us not to refuse our husbands sex because they will go out to small houses. Even when you feel you don't like it just do what you may so that you keep him satisfied. Try to push until labour. These are some of the teachings that you will not be aware of. They said breathe with two entrances [orifices] (Laughter). Some say at six months I will no longer have sex. Do not be fooled just try and give him sex so that he will be satisfied. As for me when I came from the clinic I changed at once. I am now doing what I may and not to deny him totally.” (FGD Pregnant Women, Facility D).

Regarding the church, participants stated: “At church we were taught that you should not sleep facing opposite directions” and that if one is in great pain they insisted that they were taught to “just romance or do something different and not to deny him totally.” (FGD Pregnant Women, Facility D). However, some women reported that allowing men to do non-penetrative sex acts would eventually lead these men to ask for or actually forcing sex.

C. Coercive sexual practices

The majority of participants reported enduring coercive sexual practices during pregnancy, as they felt powerless to resist. Most expressed pain, displeasure and dislike for sex during the third

trimester, and referred to uncomfortable sexual practices, having sex to keep the husband in the house, and social norms pressuring them to tolerate forced sex.

i. Uncomfortable and painful sexual styles and positions

Most participants reported that in their last trimester their husbands insisted on uncomfortable sexual acts against their will. These were commonly reported as, painful sexual positions, vigorous and energetic movements during sex, and sexual styles dictated by men for their personal satisfaction. These acts became even more painful closer to the delivery date as, “he would do it the way he likes not what I suggest...” (FGD PNC Women, Facility F). Many participants reported being forced to perform styles they thought were degrading: “These men are very promiscuous and they want the styles that they get out there. Sometimes you will not be able or you won’t know it (Interjection: he will be knowing plenty of styles!) (They all burst into laughter). Yes, they will be knowing plenty of them?” (FGD Pregnant Women, Facility E).

Many participants admitted that they would rather have painful and unsatisfying sex to make their partners happy, rather than risk their partners having sex with other women if they refused them sex (which is often threatened if the wife refuses sex). Some pregnant women have learnt to tolerate painful sex, while others have used the physical exercises offered at the clinic to enable them to perform sex with limited pain. Women described both the painful positions and the exercises matter-of-factly:

“Which is better getting the pain and boredom for thirty minutes while doing it than for him to go look for someone else? So you just do the position that he wants...And it will be over. Maybe he wouldn’t want it every day. He will be happy saying that my wife is compromising. So you as a woman you just have to be strong. Isn’t it that we have to be strong?” (FGD Pregnant Women, Facility F).

Participants reported that men believed that having sex helps to clear conflict or anger. For example, they reported being forced to have sex after an argument in the hope that the wife will forget the misunderstanding. A man who beat his partner and then demanded sex from her reportedly argued, “it is us, not our sexual organs, who have misunderstood each other.”(FGD PNC women, Facility F) In other FGDs, participants reported similar coercive sex, “Even when I am angry and I have crossed my legs the husband will try to open my legs.” (FGD Pregnant Women, Facility D).

ii. Having sex to lure him away from multiple sexual partnerships

Participants across FGDs reported that the desire to keep their partner ‘in the house’ – or to return to the house – led them to accept coerced sex, no matter how painful or unwilling they were. They reported that their partners had ‘small houses’ (a term used in Zimbabwe to refer to girlfriends/partners other than the main partner) and that they would endure sex in order to ensure that their partner did not take on other sexual partners:

“...sometimes you won’t be interested but you just force yourself to do it...You would have been told [by nurses and aunties] not to deny him. Otherwise he will be promiscuous. You will just do it to satisfy him. As for me even if I don’t feel like it I just force myself to do it just to make him happy. If I don’t do that he will leave me and go find someone else to sleep with. So if he does that and I hear about it or see it, it will be very painful for me.” (FGD PNC Women, Facility A).

Nurses confirmed that they had heard stories of women reporting their partners as being philanderers during their pregnancy. An HIV counsellor in the maternity clinic reported: “we hear women saying that, “our husband’s prostitute”, “he is not sleeping at home”, “he is again in love with his ex-lover...” (Interview with Counsellor, Facility E).

Some participants reported that if they went for a long time without sex, the husband will become suspicious and accuse her of promiscuity; and it was therefore better to accept sex despite feeling unwell.

iii. The effect of pregnancy and emotional changes on sexual violence

The pre-pregnancy period was reportedly characterised by positive sexual experiences since women could perform painless sex and were generally in good health. Participants reported that the emotional changes that took place during pregnancy, which often resulted in women wanting sex less frequently, were not well understood by men. This sharp contrast in sexual relations between the pre-pregnancy and pregnancy period sparked conflict between partners, but inevitably ended in men forcing their partners to have sex even though the woman was in pain or felt ill.

“What I have noticed is that men always want sex more when you are pregnant than when you are not.” (FGD Pregnant Women, Facility F).

“Even if you say you are not feeling like doing it he will be saying his temperature and your temperature those days will be suiting each other. So he will force you.” (FGD Pregnant Women, Facility E).

“Sometimes you will be feeling that you may no longer do it or sometimes wanting it once or after two days. But he will be expecting it every day. That’s being cruel because your body may no longer sustain that. It will be affecting you and it’s painful.” (FGD Pregnant Women, Facility E).

Other participants reported not wanting sex at all during pregnancy, even though they used to like it in the pre-pregnancy period. Some women commented that their partners would be more rough, leaving them in great pain after sex:

“When a woman is pregnant you will not even want to have sex but it causes problems. Husbands do not understand because they do not consider that I am now in a different situation, even if I used to like sex all the time if they will remember that when you were not pregnant that’s not what you used to do. As for me I only think about my husband when he is not around.” (FGD Pregnant Women, Facility D).

Many participants reported feeling too ill and weak to have sex in late pregnancy, yet men interpreted this as dislike for sex and ‘uncultural’ and so forced their partners to have sex.

Participants believed that pregnancy and emotional changes varied with the sex of the baby and whether the pregnancy was the first or a subsequent one. They associated the boy child with more problems from the partner, their dislike of sexual intercourse, and painful sex; while the girl child was associated with women ‘nagging’ the partner for more sex. The same information was reported by participants who had given birth before:

“It varies across pregnancies. My current pregnancy is different from all the previous. When I was pregnant with my daughter, it was me who was nagging him; asking for sex even during the day. He would say, ‘Can’t you see your tummy is now too big’. I would tell him that was not his concern. With my son’s pregnancy we never agreed (to have sex) till I delivered. It depends with the pregnancy. Like now I feel it’s painful. I feel like I am cracking between my legs but I will just say what else may I do.” (Laughing). (FGD Pregnant Women, Facility F).

“It happened when I was pregnant with this child. The pregnancy carrying this boy was usually troublesome. I ended up leaving him (going) to my family...” [The Shona custom called *kusungira* requires that a pregnant woman spends the third trimester with her mother, learning to become a mother but this woman left the husband much earlier because of violence] (FGD PNC Women, Facility F).

Participants reported that the influence of drugs also led their partners to engage in vigorous, painful and uncaring sexual acts: “It’s like when a man forces you to sleep with him or you have agreed to sleep with him on that occasion. He might come drunk or after having smoked dagga [marijuana]. (Laughing). He will be planning to fix you (Laughing). It will be very clear that even if he says let’s sleep together you will refuse. Maybe because the last time you slept with him (in that state) you really felt your back aching. So this issue of being forced to sleep with him is very bad” (FGD Pregnant Women, Facility C).

D. Positive, equitable and pleasurable experiences of sexuality in pregnancy

A number of participants reported positive and consensual sexual experiences during pregnancy. Some participants spoke about how their husbands understood their loss of sexual desire during pregnancy. However, in some cases it was a challenge to ensure such understanding. As one pregnant woman remarked, “I think someone explained to him because he now understands”. The following statement illustrates this further:

“As for me I may give him when I feel like giving him when I see that many days have passed without sex. We even joke about it with my husband. He sometimes phones me before he comes home and asks me if we were going to have sex. I will then tell him if the baby desires to have his daddy or not. Then he will come home fully aware that we will sleep facing opposite sides. To me that is respect.” (FGD Pregnant Women, Facility D).

In some FGDs, women reported that they participated in ‘kitchen parties’ where they shared experiences and information about sexual matters in their relationships, including during pregnancy with the aim of making sex pleasurable even in difficult circumstances. [A kitchen party in urban Zimbabwe is a social gathering organised and attended by women only, originally

to present kitchenware gifts to a newly married woman but has now extended to advising a newly married woman about sex and sexuality in a marriage]. These educational forums reportedly included information about women's rights to decide, initiate, lead in sex, and experience sexual pleasure.

It emerged that some women desired more sexual intimacy during pregnancy and in some cases their desire outstripped that of their partners. They would regularly initiate and even demand sex. This led to instances where they felt they were 'forcing' men to engage in sex more frequently than they might have wanted. The two statements below illustrate how women exercise power and agency over sexual matters in their relationships.

“My husband... said his friend was coming to work very tired every day...he said that the wife to his friend demanded sex every day saying that the nurses have said so until delivery (Laughter). The pregnancy wants the father but the father does not want the pregnancy. Thus the husband is now doing it for duty so some husbands are being forced to have sex too.” (FGD Pregnant Women, Facility D).

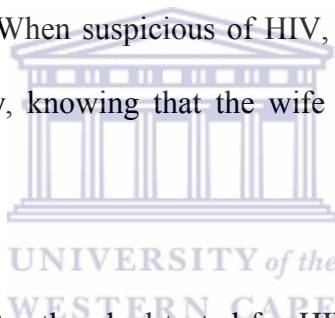
“It all depends on one's feelings. Some might want it so many times. In most cases, it is the woman. Sometimes we discuss this as women. Some women may really stand their ground. They may go on for longer hours. Much more than the husband! Some husbands are in a tight situation such that they don't even sleep at night. She will be constantly waking him up wanting more rounds of sex...” (FGD Pregnant Women, Facility A).

Again, the gender of the baby was believed to impact on sexual desire. In a group of post-partum mothers, participants who were pregnant with girls reportedly desired more frequent sex and found sex more pleasurable during pregnancy, than those who had been pregnant with boys. The same was also reported by some participants who compared their previous pregnancy with a boy child to their pregnancy with a girl child.

E. The effect of HIV testing on sexual experiences and relationships

Participants mentioned a number of control issues, abuse and sexual relationship issues related to HIV testing and prevention of mother-to-child transmission of HIV. These included needing a partner's permission to seek reproductive health care, men's refusal to test for HIV, refusing condom use to prevent HIV, refusing to disclose HIV results to female partners, and intentionally trying to infect a wife with HIV.

The study found unequal gender relations regarding HIV testing as men refused to test but expected to infer their HIV status from their partners' results. Participants and health workers reported that men saw having a baby as a way of knowing their own HIV status through their partners' HIV tests at the ANC. "When suspicious of HIV, men do not usually test through the needle but through having a baby, knowing that the wife will be tested at the clinic... (HIV Counsellor, Facility E).



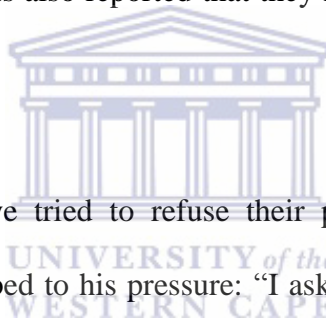
Many participants reported that after they had tested for HIV and received HIV education, they requested that their partners also test. Many refused, claiming that if the woman tested negative, then he was also negative as they were having unprotected sex. Other men lied that they had tested at work. Many refused to disclose their results to their partners and subsequently perpetrated sexual violence. Stories of intentionally infecting a female partner after the man tested positive were common in FGDs: "The husband might know that he is sick so he will come and force his wife to sleep with him and he infects her. There are men like that who do not tell their wives the truth about their status. You will only find out when you come this side [PITC clinic] that you have HIV." (FGD PNC Women, Facility A).

"The husband was sick (TB) and the wife looked after him and he recovered. Now after some years the wife got pregnant and the husband was the one who forced the

wife to have a child knowing very well his experiments he was doing. The wife tested HIV positive...She persuaded him [to test] ... and they were both positive... and the husband took that to say the wife was the one who had brought the disease into the house.” (FGD Pregnant Women, Facility D).

“What we have discovered is that some of these mothers when they test positive...later on you discover that this man had earlier on tested and he knew his status but did not disclose it to the partner... She will come and tell me, ‘Sister I don’t understand this. When I told my husband about my status, he was not surprised at all...I think he tested before but he did not tell me about it’” (Interview with Sister in Charge, Facility F).

In the case of a woman testing positive, the male would often accuse her of prostitution and of ‘bringing the disease’ into the house. If the man tested positive, he would still blame the woman for infecting him. Some participants also reported that they risked being chased away from home if they tested positive.



Some women who tested negative tried to refuse their partners sex until they were tested. However, they eventually succumbed to his pressure: “I asked my partner to go for a test but he refused. He said he does not have the disease saying that since I didn’t have it meant that he didn’t have it as well. I told him to go for tests. I even refused to sleep with him... if he was not tested. In the end I gave in because he was not going for the tests anyway” (FGD PNC Women, Facility A).

Other women who tested negative requested their partners to use condoms until they were tested.

They would often face resistance, as described below:

“There is another problem when the wife is negative the husband will do tricks so as to make the wife positive too. There is a couple I know whereby the husband will take off the condom during sex in an attempt to infect the wife. The wife tested negative three times when these incidents occurred and she decided to leave the husband... Yet she was the one who was looking after him and going to collect his medication.” (FGD Pregnant Women, Facility D).

“You would like him to use a condom because you will be aware of how things stand. The man won’t accept that.” (FGD Pregnant Women, Facility E).

“Another form of abuse that we see is that men refuse to use condoms when they actually know that they are positive.” (Interview with Counsellor, Facility E).

Discussion

The major theme of the narratives recounted by the participants was men’s use of overt or threatened violence or abandonment to control female sexuality, and norms that undermine women’s control over their sexuality. A related theme was that HIV testing and disclosure increases the risk of sexual coercion and violence, while sexual coercion and violence limit women’s – and men’s – capacity to protect themselves from or appropriately manage HIV infection. The paper also highlighted that women’s diminished sexual interest during pregnancy, especially in the third trimester, was not understood or respected by men. However, the women do not recount a simple and uniform passivity or ‘victimhood’: we also presented evidence of how women demonstrated agency in negotiating and demanding pleasurable and equitable sexual relations during pregnancy.

Underlying the theme of physical and emotional changes during pregnancy and how this affects sexuality is the importance of social norms, unequal power relations, and the social and economic vulnerability of women as reported elsewhere (Swidler and Wwatkins 2007). Familial and cultural norms around the role of married women, reproductive health and pregnancy, and when and how

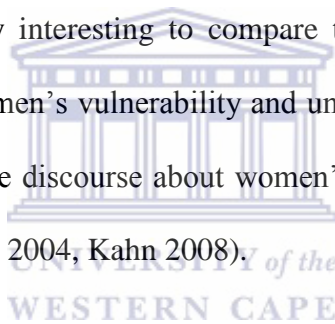
sex is to be performed, impact on women's agency and facilitate a situation which is conducive to sexual violence.

Women's economic vulnerability further facilitates partner abuse, in line with other studies (Jewkes 2002, Jewkes, Nduna *et al.* 2008, Shamu, Abrahams *et al.* 2011). Almost all participants in the study were unemployed and financially dependent on their partners for their (and their child's) survival and support during and after the pregnancy. Given the harsh economic environment in Zimbabwe at the time of this research, where unemployment was around 80%, risking the loss of a marriage or partnership with an employed man during pregnancy was detrimental to economic survival and meeting health needs. The burden of sexual violence was lighter for many women than the perceived economic burden of being divorced. Respondents expressed an inability to refuse coercive and unsafe sex for fear of being divorced in a community where single women have less moral worth and are exposed to economic vagaries, compared to married women. This relationship may be compared to the patron-client relationships which adolescents in East Africa entered with 'sugar daddies' (older sexual partners) in return for economic gifts from these abusive partners (Silberschmidt and Rash 2001).

'Culture', 'tradition' and social institutions play a major role in initiating, strengthening and reproducing women's subordinate position and the potential to be abused by their partners. The widely taught traditional norm of sexual submission of wives was reinforced by the family, church and health institutions. Von Sydow's (1999) review of 59 studies of sexuality during pregnancy notes that most participants reported that health workers' advice about sexual intercourse was restrictive. Our findings suggest that health workers, who share the same culture as their clients,

subscribe to the same doctrine of male control over women's sexuality. This calls for widespread community campaigns and the education of health workers for gender equity in sexuality.

Traditional feminine and masculine roles regarding sex and sexuality apply to pregnant women as much as they do to women in general. In other anthropological studies in Zimbabwe, women were reportedly not expected to initiate sex or show sexual pleasure as this suggests sexual experience, whereas they are expected to be less sexually experienced than their partners (Sexual Offenses Act 2001, Kambarami 2006). However, some participants in our study openly discussed their sexuality and heightened sexual desires during pregnancy, foregrounding their sense of agency in their relationships. It is especially interesting to compare this with the majority of studies in southern Africa, that highlight women's vulnerability and unequal power relationships with men, as well as the absence of a positive discourse about women's sexuality (see for example (Shefer and Foster 2002, Lesch and Kruger 2004, Kahn 2008).



Negative forms of masculinity were also demonstrated in the study with men perpetrating risky sexual behaviours such as having multiple sexual partnerships; forcing sex; denying that they could be HIV infected; refusing HIV testing or safe sex; not disclosing their HIV status; blaming partners for positive test results; and perpetrating sexual violence under the influence of alcohol. Similar heterosexual masculinity among South African men have been reported elsewhere (Shefer 2009, Jewkes and Morrell 2010).

Although there are laws in Zimbabwe that prohibit marital rape and intentional HIV infection in partnerships, the practice remains common, and is characterised more by non-physical coercion

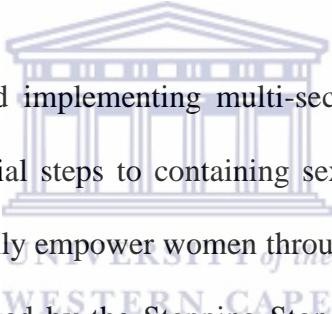
than by physical force. Unlike violence perpetrated by strangers which involves physical force (Mahoney and Williams 2007), rape in this study is mainly marital, and stems from women's cultural submission to men. Women learned and increasingly felt that they had to perform 'wifely duties' by being obedient to their partners' sexual demands. In most cases women reported feeling obligated and 'forced themselves' to have sex to please their partners, not themselves.

We reported on women's agency as demonstrated by some women who were empowered and could negotiate or dictate more equitable and satisfying sexual relationships. This agency shows that women were not just passive sexual partners; they also demonstrated some form of sexual power over their partners during pregnancy. This finding resonates with discussions of changing notions of empowerment that Silberschmidt (2001) postulated among women in East Africa in which women increasingly gained sexual power over their economically disempowered men.

The study had some limitations. The sample was small and each participant had only one opportunity to reflect on and discuss the issues. Most of the data is based on women's reported experiences which may not necessarily reflect their partner's views and behaviours. More research involving men is needed to understand their views on the perpetration of sexual violence. However, studies on violence against women show that it is very unlikely for women to over-report their experiences, and that in fact they tend to minimise the violence (Jewkes and Abrahams 2002).

Conclusion

This paper has shown how complex sexual violence during pregnancy is in Zimbabwe and the many ways in which it is shaped by traditional norms and reinforced by social institutions, kinship and professional relationships. Most of the reported sexual violence was in the form of coercive sexual practices influenced by dominant male masculinity in society. While pregnancy is an opportunity to test and disclose HIV status (Brou, Djohan *et al* 2007), participants reported that an HIV positive result may lead to abandonment, divorce and sexual violence. Such experiences have been reported elsewhere (Gielen, McDonnel *et al.* 2002, Mlay, Lugina *et al.* 2008). Furthermore, women's economic dependency is easily exploited by their partners, especially when women are at their most vulnerable – during pregnancy.



Educating communities about, and implementing multi-sectoral approaches towards, safe and equitable sexual relations are crucial steps to containing sexual violence during pregnancy. An important part of this is to financially empower women through educational workshops and credit schemes, as effectively demonstrated by the Stepping Stones (Jewkes, Nduna *et al.* 2008) and IMAGE (Pronyk, Kim *et al.* 2008) studies in South Africa. However, transforming unhealthy and coercive models of masculinity and femininity will require sustained efforts across all levels and institutions of society.

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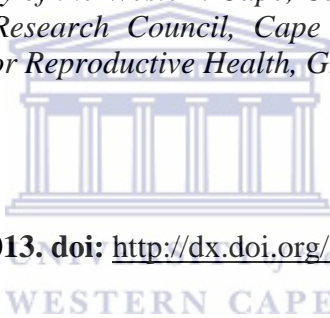
Chapter Nine

PAPER V: OPPORTUNITIES AND OBSTACLES TO SCREENING PREGNANT WOMEN FOR INTIMATE PARTNER VIOLENCE DURING ANTENATAL CARE IN ZIMBABWE

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Abstract

Pregnancy offers an opportunity for midwives to recognise and respond to women experiencing intimate partner violence (IPV). However, most antenatal care interventions have been conducted in private specialist services in high-income countries and do not address the structural and cultural realities of developing country settings. We report on an exploratory qualitative study in antenatal public health facilities in Harare, Zimbabwe involving six in-depth interviews with midwives and seven focus group discussions with 64 pregnant and postpartum women.

Recorded interviews were transcribed verbatim and analysed using thematic content analysis. We found that identifying and responding to IPV in antenatal care is hampered by inadequate human, financial and infrastructural resources as well as poor support of gender-based-violence training for midwives. Midwives had divergent views of their role with some perceiving IPV as a non-clinical, social and domestic problem that does not require their attention while others who had been sensitised to the problem felt that it could easily overwhelm them. A comprehensive response to IPV by midwives would be difficult to achieve in this setting, but sensitised midwives could respond to cues to violence and ultimately assist abused women in culturally sensitive and appropriate ways.

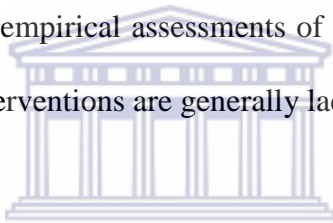
Keywords: pregnant women; screening; intimate partner violence; midwives; Zimbabwe

Introduction

Intimate partner violence (IPV) during the time of pregnancy impacts negatively on women's reproductive health and on their babies. Studies have shown its association with unsafe abortion, gynaecological disorders, pregnancy complications, miscarriage, low birth weight and STI/HIV infection (Heise, Ellsberg *et al.* 2002, WHO 2005, Silverman, Decker *et al.* 2006, Audi, Correa *et al.* 2008). The pregnancy period offers a unique opportunity to identify and assist women experiencing IPV (Bacchus, Mezey *et al.* 2004) as many pregnant women frequently visit antenatal care clinics. Recent reviews have also shown that the identification of abuse increases sharply when universal routine screening is conducted in health settings like antenatal care (Bacchus, Bewley *et al.* 2010, O'Campo, Kirst *et al.* 2011). Literature on patterns of IPV suggests that violence may begin, continue or increase during pregnancy (Taillieu and Brownridge 2010), pointing to the important role that screening and the provision of comprehensive care to abused women could play in decreasing the impact of abuse on the health of women and their children (O'Campo, Kirst *et al.* 2011). This is particularly relevant for countries and regions where high levels of IPV have been reported. The prevalence of physical IPV during pregnancy (8%) in Zimbabwe (CSO and Macro 2007) is among the higher levels recorded recently (Shamu, Abrahams *et al.* 2011)

A recent review of the effectiveness of universal and routine IPV screening in health settings concluded that a multiple component programme that includes initial and on-going staff training, effective screening protocols, institutional support, and immediate onsite or offsite referral services increases disclosure and identification of abused women (O'Campo, Kirst *et al.* 2011). Although routine screening for violence in health settings has been endorsed by many health

professional organisations including the American academies and colleges of gynaecologists and paediatricians (Waalens, Goodwin *et al.* 2000, Roelens, Verstraelen *et al.* 2006), few health settings in the world have begun implementing this intervention. Most African health settings do not meet the above criteria for comprehensive programmes to respond to IPV because of their weak health systems, lack of infrastructure and human resources as well as cultural reasons which inhibit discussing or disclosing domestic life outside of the home. Unlike Western countries, many health systems in Africa are yet to recognise IPV as a health problem or that the health sector has a role to play. The fact that any screening programme must lead to appropriate care, imposes major challenges to ill-equipped and short-staffed health and social care systems in many environments in Africa. However, empirical assessments of the ‘readiness’ of African healthcare settings for comprehensive IPV interventions are generally lacking.



Women’s views about being screened in health settings have been documented as generally pro-screening (Ramsay, Richardson *et al.* 2002). Ninety-eight percent of the 1313 rural and urban female patients interviewed in Australia, believed it was a good idea to be screened (Webster, Stratigos *et al.* 2001). In the USA abused women were one and a half times more likely to agree to screening than women who reported no abuse (Gielen, O’Campo *et al.* 2000).

Bacchus, Mezey *et al.* (2002)’s qualitative study in the UK showed that women were willing to participate in IPV interventions if their safety and confidentiality were guaranteed. Women preferred to be interviewed by trained health professionals who are empathetic, non-judgemental and genuinely interested in the client’s health and wellbeing. The importance of cultural sensitivity in screening to encourage disclosure of violence has been highlighted (Hindin 2006)

and understanding the client's language and non-verbal cues when trying to identify and respond to IPV is essential for its success. A trusting relationship between a midwife and a client helps when responding to violence (Stenson, Sidenvall *et al.* 2005). Although these studies demonstrate women's positive attitude to being screened and how culture influences responses to IPV they were all conducted in developed countries and predominantly in specialist and private, obstetrical-gynaecological offices rather than in busy public primary health care settings. Similar studies about the views of pregnant women in African health care settings are only beginning (Joyner and Mash 2012, Undie, Maternowska *et al.* 2012). In Zimbabwe and other developing settings where most pregnant women are attended to by nurses in public health settings (CSO and Macro 2007) women's views about being screened for IPV could be different.

IPV screening is not part of current clinical practice in Zimbabwe yet high IPV rates during pregnancy in Zimbabwe (CSO and Macro 2007) seem to warrant it. This paper aims to explore the current environment in order to identify opportunities and obstacles for interventions aimed at identifying and responding to IPV in antenatal care. The paper presents formative research from a broader study of the dynamics of IPV during pregnancy in Zimbabwe. The formative study provided an opportunity to explore perceptions and experiences of nurse midwives working in Zimbabwe's public maternity services regarding IPV among pregnant women, including possible responses in the clinic setting. Perceptions and experiences of women attending these services were also explored.

Methods

Study setting

The setting of the study is within six public antenatal care clinics located in low-income residential areas in Harare. These clinics were purposively selected because of their long-standing

relationship with a local university teaching programme. Most clinics included in the study had antenatal services three days a week and up to 35 women were attended each day per clinic. Clinics controlled the maximum number of pregnant women by dismissing ‘excesses’ if the turn-up was higher than their daily quota. There were chronic staff shortages in the maternity services owing to brain drain and nurses would often be shifted from one department to another. Each antenatal clinic was located in a polyclinic, which also housed the primary health care and family health clinics. Women gave birth in the maternity ward of the antenatal care clinic and brought their babies to the family health clinics. At the time of the study, a fee of US\$50 was charged to each woman for antenatal, labour and post-natal care.

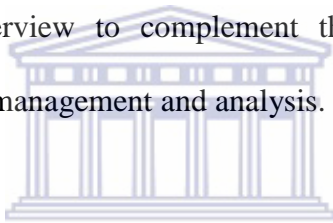
We sought and obtained ethical clearance from the Medical Research Council of Zimbabwe and the University of the Western Cape Senate Research committee, while permission to conduct the study at the six facilities was provided by the City Health Directorate. To preserve the anonymity of women, health workers and clinic sites, we have replaced their names with pseudonyms

Design

We used qualitative methods including in-depth interviews, focus group discussions and observation. The in-depth interviews were held with service providers, and focus group discussions were held with pregnant and nursing women to explore health workers’ and women’s views and perceptions of responding to IPV (physical, sexual and emotional) during pregnancy. During the data collection phase, the researcher spent time in the clinic and observed the clinic space and clinical interactions during the antenatal care sessions.

Interviewing health workers

At each of the six clinics, one senior nurse midwife (sister-in-charge) in charge of the maternity clinic was purposively selected to participate in the interviews (six in-depth interviews). The ages of midwives ranged between 40 and 60 years. The first author made appointments with midwives, sought and received written informed consent and held in-depth key informant interviews privately in their offices. The interview guide explored how midwives recognised IPV, how they dealt with suspected or identified cases, what obstacles they faced in trying to recognise abused women, and opportunities available to them and the health system to help abused women. Interviews were held in English but participants could switch to vernacular (Shona), especially when quoting women's reported experiences. The interviews were digitally recorded, supported by written notes after each interview to complement the interview information that was transcribed in preparation for data management and analysis.

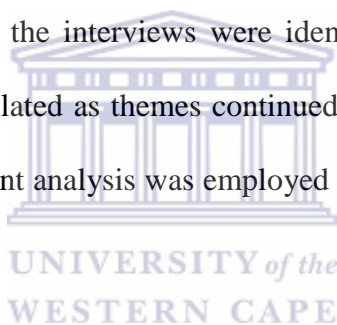


Focus group discussions with pregnant women

The researcher approached women at the six clinics where they queued to receive antenatal or postnatal care services and informed them about the study. We invited all women in the queue if they were less than 10 or randomly invited up to 10 if more. Consent procedures followed for those who accepted the invitation. The first author led the discussions in the vernacular and a female research assistant operated the digital recording and took field notes which contributed to the data. The primary goal of the discussions was to explore experiences of IPV during pregnancy and to help develop a tool for the broader quantitative study. Information about how health providers respond to IPV during pregnancy emerged during the discussions. Sixty-four women participated in seven focus group discussions held separately with pregnant and nursing mothers at the six health facilities.

Data analysis

We transcribed the digitally recorded data verbatim and parts of the transcriptions that were in Shona were translated to English. An independent translator double-checked the translations by listening to audio-records and back translated the sections of the transcript that were originally captured in Shona back into Shona for accuracy and consistency. The first author repeatedly read the transcripts and constructed codes in line with research objectives; the co-authors and additional researchers independently reviewed sections of transcripts and commented on the interim analysis. We used the Open Code qualitative software to organise the data into codes and categories. Common themes from the interviews were identified and data were organised into categories. New codes were formulated as themes continued to emerge during the process of re-reading the scripts. Thematic content analysis was employed to systematically analyse the content of each theme.

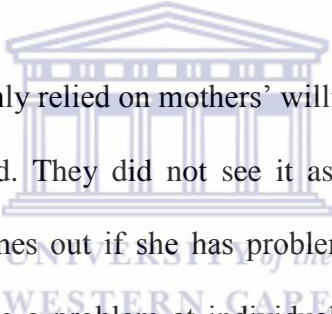


Findings

Four core themes related to the possibilities of screening and/or intervening against IPV in these settings were identified: identification of abused women by midwives, women's accounts of midwives' interpretation of IPV, midwives' experiences of responding to IPV in a planned intervention in antenatal care including how this opportunity was lost, and the influence of culture and the law in identifying and responding to abused women.

Identifying abused women: the current practice

All midwives stated that they had no specific training, skills or competence to recognise abused women during antenatal and postnatal care and that no facilities were conducting any form of screening for IPV. Midwives reported diverse ways of responding to IPV. They reported that they were able to recognise only the more obvious cases such as those who had ‘bruises’ or ‘injuries’ on their bodies. They indicated that physical violence was a bit easier to detect compared to other forms of violence: “Perhaps if there are quite obvious marks from battering such as some bruises” (Anna, midwife, Mutenda clinic). Visible emotions were also recognised as signs of problems in intimate relations as described, “And most of the times you will see this by crying” (Fadzai, midwife, Chineka Clinic).



Midwives mentioned that they mainly relied on mothers’ willingness to reveal their experiences of violence, which mothers rarely did. They did not see it as their role to identify the violence: “Usually it is the mother who comes out if she has problems...We do not screen...It is for the mother to come out and say I have a problem at individual level” (Bridget, midwife, Nekanda Clinic). Midwives recognised that women also do not talk about the abuse easily and that the violence gets revealed in indirect ways such as when condom use was discussed with the women as one midwife remarked:

“They do not come in the open when it comes to the issue of sex after HIV tests. They take condoms in fear because they say, “I will be beaten up at home if he finds condoms in my bag”. They want to consult with partners first before taking condoms. Their partners accuse them of prostitution if they find them with condoms” (Carol, midwife, Bungu clinic).

Midwives reported that very few women spontaneously disclosed their experiences. One midwife described how often she identified abused women in the following manner, “Very rare. I don’t want to lie, very, very rare” (Bridget, midwife, Nekanda Clinic). Although the midwives assigned

responsibility to women to disclose they also recognised their own role and the dynamics of the provider-client relationship:

‘No I haven’t come across such cases (sexual and emotional violence). Maybe they are not putting it across clearly and I think with the time that we have we are not probing enough as well. So we treat maybe on the surface and some of these issues go unnoticed’ (Anna, midwife, Mutenda Clinic).

This is further complicated by a lack of technical or professional language for dealing with IPV as a health issue. Women tend to use non-direct language when describing partner and sexual violence and midwives perceived and experienced difficulties in responding to such a sensitive phenomenon in vernacular language during history taking. One midwife at Vurinda Clinic remarked that “It is difficult to ask in Shona if they are experiencing partner or family abuse”. At one of the busiest antenatal care clinics (Madzive clinic), the midwife mentioned that they were not asking questions on violence because they thought the prevalence and effects of violence during pregnancy were insignificant and did not require them to intervene:

“You know why I am a bit hesitant? It’s because usually what leads us to investigate is the frequency of the patients complaining about that. When we don’t get the complaints usually we don’t want to get involved...the frequency and occurrence of the problem, the magnitude of the problem. (When) we are worried about that... (we) try to investigate. Currently to be honest I haven’t had a case of a woman being mistreated by a husband...” (Diana, midwife, Madzive clinic).

However, research suggests that most violence victims do not report their experiences without being asked (Roelens, Verstraelen *et al.* 2006), and as noted above midwives indicated that they recognised that violence could be concealed. Midwives also recognised that one needed a great deal of time and skill to identify a case. One midwife gained some sensitisation and experience by witnessing a non-governmental organisation intervention on domestic violence at their clinic, a few years ago. The exposure to this program in the clinic has made her view things differently and she consistently showed much more empathy than the other midwives and realised that listening

to patients was critical. This she demonstrated when she said mothers only open up after a great deal of time and effort:

“There are cases when someone would come with a queer complaint. It won't be looking like it's the case. You will see that this person is not sick but there is something wrong. Then you sit and discuss with that person that's when she will open up. She will (then) say nurse I am not feeling well because my husband is doing this and this. They open up that way” (Fadzai, midwife, Chineka Clinic).

Midwives at Chineka clinic reported how suspicion of abuse was raised in the labour ward when the women's social problems with their partners were recognised. An example was given when a midwife explained how a woman did not have the prepared items that the father normally buys in preparation for the baby as non-buying of these items was demonstration of father's non-interest in the baby. She reported that they did not think it was safe for a woman to be discharged home after the birth of her baby and had kept her, for some time until they were satisfied that she had some support from family.

“So sometimes you end up saying to her you are not going home. You don't discharge her. You keep her there. Then when people come to visit her you try to find out if there is the mother. Or even someone who is very close to her. You then try to find out if there are problems at home. If she is facing any problems. Maybe...if she is having any problems with the husband” (Fadzai, midwife, Chineka Clinic).

This response to ensure women's safety is evidence of midwives' own initiative despite working in a system that does not encourage them to do so.

The interviews reflected midwives' mixed feelings about responding to IPV in antenatal care and suggested an unresolved tension between what is considered an appropriate professional response versus a private matter to which they as women felt obliged to respond. The majority strongly viewed it as adding another huge task to a skeletal staff at the facilities despite also viewing it as important for pregnant mothers. One respondent reported: “Do you want to add more work to us?”

We treat patients and you want to involve us in those who are battered? It's a lot of work, though good." (Ednah, midwife, Vurinda clinic). Midwives drew a line between their clinical work for which they were trained and what they called social problems, including violence, which they did not think should be in their clinical practice. The amount of time required to assist women experiencing violence during the clinic sessions could be viewed as a constraint, should IPV screening be implemented in antenatal care. A midwife who learnt that more time is needed to deal with women in abusive relations, which is not possible with the long queues during working hours at the clinic, said that talking to women outside of the clinic setting could be easier:

"Some of them they don't disclose... If you take time with that mother that's when you find out there is something wrong. That's when she will open up. Personally, I live right here. There are some whom I see and they open up. Such that after being tested [for HIV] they come to me. She might not come to the clinic. She will come to my house...and then we sit down and discuss. I tell her the options and what she may do. When you are doing it out there they will be seeing it...differently...we will be talking about it at the same level at home...or some of them at church..." (Fadzai, midwife, Chineka Clinic).

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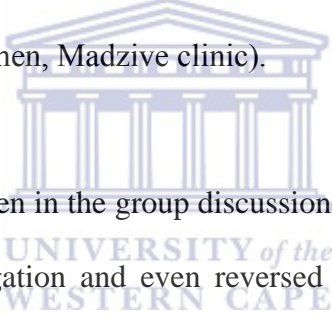
"Nurses taught us not to refuse our husbands sex"

Providing health information and advice (which include nutrition, hygiene, physical exercises and sexual health education) during group or one to one sessions was an important aspect of education during antenatal care visits. Women's experiences of these teaching moments revealed health workers' poor recognition of intimate partner sexual violence. Negative gender stereotypes were inadvertently reinforced by midwives. While pregnant women expected to receive information on how to avoid violence in their relationships, they were advised and taught how to be subordinate to their male partners and accept forced sex. As reported during focus group discussions with women:

"We came yesterday and the nurses taught us not to refuse our husbands sex because they will go out to small houses [girlfriends]. Even when you feel you

don't like it [sex] just do what you can so that you keep him satisfied. Try to push until labour. These are some of the teachings that you will not be aware of. They [midwives] said breathe with two entrances [orifices] [Laughter]. Some (women) say 'at six months I will no longer have sex'. Do not be fooled, just try and give him sex so that he will be satisfied" (Doreen, FGD Pregnant women, Madzive Clinic).

Although this teaching was intended to reduce the risk of HIV infection, women were given the responsibility to ensure their male partners do not engage in multiple concurrent sexual relationships. These recommendations from the midwives taught women that male sexual needs superseded their own sexual and psychological needs and the health of their unborn child. That such advice is at least sometimes taken to heart was revealed by one woman who said "As for me when I came from the clinic I changed at once. I am now doing what I can and not to deny him [sex]" (Patricia, FGD Pregnant women, Madzive clinic).



However, while many women in the group discussion seemed to have accepted the advice, a few women rejected this subjugation and even reversed the teachings completely as shown below:

"As for me I even lied when I came back from clinic. I saw that I was going to die [Laughter]. I told him that the nurses said 'you should not abuse and force me to have sex'. If you force me, I will go back and report you to the nurses and you will go to the police. If you are taken by the police what will I do'. He understood me" (Makanaka, FGD Pregnant Women, Madzive Clinic).

The data from the FGD with women is supported by the interviews with midwives. Diana, a midwife at Madzive Clinic reported that they advised women not to refuse sex during pregnancy as their clinical practice does not forbid sex during pregnancy. The poor knowledge and understanding by health workers of what constitutes sexual violence clearly impedes their ability to recognise IPV. If midwives endorsed some forms of sexual violence they were also unlikely to

recognise other forms, even if women's statements provide cues to experiences of sexual violence.

The lack of knowledge on the part of midwives is indicated in the following quote.

“With pregnant mothers at times we wouldn't even know that this [forced sex] is abuse because when we meet them they report [refusing sex]...we wouldn't be able to know whether this person is being abused or not...When we ask them they say ‘the stomach is now too big and I don't want anybody on top of it’” (Fadzai, midwife, Chineka Clinic).

Dealing with cases: the current practice

In many cases, health workers did not take any action once they became aware of cases of violence other than just noting them as social problems. Some cases were reported to a referral (tertiary) hospital. External bodily injuries were reported to the police for prosecution and to the doctor for proper assessments. Musasa, a non-governmental organisation that works against gender-based-violence in Harare, was also mentioned as a referral centre for abused women. As one midwife remarked, “If it is a serious case we may refer them to places like Musasa, but we have never referred anybody” (Bridget, Midwife, Nekanda clinic). At Mutenda clinic there used to be a non-governmental organisation that employed midwives and counsellors trained in IPV counselling. They holistically helped abused women by counselling them and providing financial resources and other support needed. Some midwives remarked that since it was a matter of domestic issues, it was proper to refer such issues to traditional or family courts as per their culture. The midwife at Nekanda clinic reported, “We usually advise them to use the support systems in their homes - aunties, grandmothers”.

Midwives felt that once violence cases were identified, dealing with those cases could be an issue to grapple with as they had no faith in the criminal justice system. The perceived reluctance of the courts to deal with reported cases was an obstacle to responding to violence. The midwife at

Vurinda clinic stated that she had “never seen courts taking these issues seriously, so there is no seriousness in these violence cases”. This perception influenced their thinking that abuse cases would not be fairly and satisfactorily dealt with.

“And this organisation is no longer coming to screen”

A midwife at Chineka clinic described how a non-governmental organisation working at their clinic helped their clients who were abused and how the health system never tapped this opportunity for the midwives to refer or assist abused women after the non-governmental organisation left. She reported:

“We used to have this organisation... They were after these pregnancy issues. They could see them (pregnant women) from the initial bookings and talking to them and giving them information about ... any problems at home with the husband. They were here to assist them. It’s the one that looked after that. As for us we don’t... And this organisation is no longer coming. I don’t know what happened... They used to come during the initial visit and... subsequent visits... They would also hold interviews with mothers in the post-delivery section especially the un-booked mothers; they would want to know the reasons why they were not booked. Some mothers would say I didn’t have the money because my husband was refusing to give me the money. They would ask if he was bringing her food... The organisation would pay a certain amount and the other amount would be paid by the City of Harare (health department)... (Fadzai, midwife, Chineka Clinic).

In this case, the midwife lamented over an opportunity that was lost. They could have learned from the non-governmental organisation they worked with to screen and deal with IPV cases. She also reported that she often recommended to the city health authorities to introduce a screening programme, a recommendation that was never considered.

So we have talked about it (IPV screening) so that it is included in our planning. ... the days when that organisation came... we left those issues to them because they were trained and they had a trained nurse and midwife. So to us as Facility F... we now see that it’s (IPV) not being talked about... But I think we need to include that in our programme... Because we believe that some of them have got problems... “We were never put onto that programme... though we just talk about the problems we face at ANC when we submit our reports” (Fadzai, midwife, Chineka Clinic).

An opportunity to integrate screening into the maternity care programme was lost. The midwife explained how the absence of the programme prevented them from assisting a woman:

“Like this person I still remember she was saying her husband has another wife but she is the first wife (and was being neglected)... The husband was not giving her money to come and register. In the end she had to go and seek money from her brother in Mazowe. That’s when she came to register but we used to see (at the clinic) that she was pregnant but not booked. And we were now in a dilemma as to what we were going to do about her. To someone who opens up that she does not have the money the Council [Health Department] says that she may pay half and then pay the rest after delivery. (She then travelled a long distance by bus and foot to get some money while she was nine months pregnant). That’s when she came to register and to make matters worse she had some complications and we transferred her to Mbuya Nehanda [tertiary hospital]” (Fadzai, midwife, Chineka Clinic)

Booking pregnancies in antenatal care involved paying a registration fee of US\$50, non-payment of which would deprive a pregnant woman of access to antenatal care services. In this case, the nurses watched her situation helplessly recognising she was not booked due to financial problems. Further inquiry showed that nurses suspected that the situation at home and the travelling when she had problems walking contributed to complications leading her to be referred to a tertiary hospital. This case also shows how policy and structural factors together with gender-based-violence increase women’s vulnerability.

Culture, confidentiality and the law

On probing, midwives reported a number of cultural factors influencing responses to IPV. They described women’s non-disclosure of domestic issues as a ‘culture of silence’. They perceived this to be one of the major challenges in responding to IPV at the clinic. A midwife said: “Aah I don’t know whether we will get that many women who will be open about that. Most women are secretive about domestic violence.” (Bridget, midwife, Nekanda Clinic). Another midwife reported similar difficulties and recognised the health implications of non-reporting saying:

“They don’t open up... Because like now she could have been admitted (she referred to a woman who miscarried but after investigations it was discovered that she was experiencing domestic violence). You sit down with her and try to talk...they don’t open up but you may clearly see that there is a problem”. (Fadzai, midwife, Chineka Clinic).

However, beyond – and compounding a culture of silence regarding domestic violence, an important reason for women’s reluctance to report appears to be related to midwives not being trusted with the information. Women suspected that nurses do not keep their domestic stories confidential and fear of the repercussions from their partners, should they discover that the women reported the abuse was a barrier. Women also feared that such issues could spread into the community since a number of midwives lived in the same community with them. Midwives added that women feared that if they disclosed violence at the clinic, their husbands would end up in jail, thereby risking their family life and economic livelihoods. For example, midwives reported:

“There is also a tendency of women protecting their husbands because of this Domestic Violence Act. The moment you try to talk and ask them they think you want to drag their husbands to the police” (Diana, midwife, Madzive clinic).

It was also noted that violent experiences that happened between a woman and her partner were regarded as domestic and could not be discussed with other people outside. One midwife mentioned, “They may have this negative attitude of saying I cannot discuss my family issues with the nurse” (Fadzai, midwife at Chineka Clinic).

Participants in the focus group discussion and our observations revealed that there was limited infrastructure to facilitate privacy during history taking at five of the six clinics studied. It was observed during participant observation and in FGD, women explained the lack of a private space during interactions with midwives. All services took place in close proximity of other pregnant

women seated on benches waiting their turn. In general, most of the activities of the antenatal care visits took place in a foyer/hall or entrance which is also used by visitors and staff of the maternity ward and clinic offices. Any disclosure of personal or domestic information would be heard by others on queue.

Discussion

The study presents a situational analysis around midwives and their thoughts of and experiences with identifying and responding to IPV against women during pregnancy, as well as the experiences of their clients. The study reveals the complexity and difficulty in responding to IPV in antenatal and postnatal care in a resource-limited setting. It showed that responding to IPV in antenatal settings is difficult for both health-sector related reasons and midwives' own embeddedness in a patriarchal culture which normalises IPV. Challenges include midwives' lack of specific education and training, high workloads and time pressures; the health system's lack of infrastructure, privacy, guiding policy, support, staff and other resources; midwives' own beliefs and previous experiences; women's non-disclosure of domestic issues; and cultural taboos . These multiple layered complexities created barriers at different levels and any intervention would need to address these barriers in an integrated and comprehensive way. However, the potential impact of sensitisation and informal training could be seen from Facility F staff who acquired some knowledge of responding to IPV by observing and interacting with trained staff of the non-governmental organisation that ran a screening programme at their clinic. This intervention programme, although directed at the pregnant women, also had an unintended positive effect on the staff.

Our findings echo earlier findings on the lack of gender-based-violence training and education among midwives (Waalén, Goodwin *et al.* 2000, Erickson, Hill *et al.* 2001, Bacchus, Mezey *et al.* 2002, Stenson, Sidenvall *et al.* 2005, O'Reilly 2007) reflecting health policy silence regarding gender-based-violence. This study suggests that initiating screening as suggested in developed settings would be challenging in resource-limited settings. Research in South Africa demonstrated that screening all women seeking care is expensive, while responding to specific cues could help address the problem with less human and financial resources (Joyner and Mash 2012). The context of staff shortages makes the additional task of screening especially for a non-biological problem, much more difficult to accept, hence the need to develop practices that tap into nurses' clinical training and practices and also those that respond to the needs of patients. In busy public health settings, it is possible that not all women need be screened, but that those at high-risk be identified. It is encouraging that midwives themselves felt that the training of nurses could play a role, as some were sensitised by being exposed to services that support IPV survivors. Also, while midwives were not trained in gender-based-violence, some were able to assist or refer abused women after recognising cues.

The midwives' opportunities to address IPV in health promotion lessons were however, wasted as pregnant women in the study reported being advised to submit to sexual violence perpetrated by their partners. The opportunity could have been utilised positively to empower pregnant women to negotiate safer sex if the midwives believed it to be the right thing and also if they knew how to do it. Midwives' main concern was HIV prevention by preventing men from having multiple concurrent sexual relationships which could create HIV risk for women; however, this was done without any consideration of its impact on sexual violence. These and other data from our study

suggest that midwives perceived sexual violence as a normal phenomenon and that the link between sexual violence and HIV risk among pregnant women needs to be better understood in the context of improved antenatal care. The opportunity of group health promotion lessons with each antenatal visit could have additional benefits if midwives were trained to offer IPV group awareness and counselling.

The study revealed health system shortcomings regarding responding to and assisting abused women. Firstly, we find a disjuncture between health system policy and health workers' operations. While midwives recommended to health managers the need to implement a programme that would help them to identify and assist abused women, the latter did not see it as a priority. The fact that pregnant women without money could not afford to access maternity health services and the inability of nurses to at least bring those not able to pay to the attention of facility management for waiver of fees (as per the local health system policy), reveals a significant health system failure. It also meant that pregnant women missed the opportunity of antenatal care which has a huge impact on maternal and child health since those who failed to pay antenatal care fees only accessed care when in labour or delivered at home. Secondly, the non-sustainability of new health interventions which run parallel to the existing system in antenatal care deserves attention. The non-governmental organisation that operated at Facility F was a good example of an unsustainable parallel intervention. There is need to integrate such interventions in existing health care programmes for a sustained service.

Despite evidence showing patients' positive attitude towards domestic violence screening (Gielen, O'Campo *et al.* 2000, Webster, Stratigos *et al.* 2001, Ramsay, Richardson *et al.* 2002) health

workers in our study reported women's perceived non-disclosure of violence as a major challenge. While providers cited a culture of silence on the part of pregnant women, the latter reported unavailability of private space to discuss their personal and domestic problems with their providers and this was also illustrated by the fact that some women would follow a nurse at home or church to discuss their problems. Structural and infrastructural issues in the health system must be addressed to enable responding to IPV in antenatal care. The fact that pregnant women in the study had low incomes, many of them unemployed and dependent on their partners, could also explain the perceived fear to disclose their abuse experiences. For women, disclosing their abuse experiences implied that their partners could be jailed thereby ruining their economic livelihoods. They also feared further abuse after they reported their partners as abusive. The perception of some respondents that other government departments were not taking domestic violence seriously was corroborated by Chirawu who argued that there has not been a single case of IPV brought to the courts for prosecution by 2006 since sexual offenses law was enacted in 2001 despite high prevalence of IPV in Zimbabwe (Chirawu 2006).

Midwives seemed to emphasise that reporting violence results in progressing to court as the only outcome, yet attrition studies (Jewkes and Abrahams 2002) show that most women do not want to progress to the court system. Midwives did not recognise that they could play a significant role just by listening to women narrating their problems. Hindin (2006) found that there was need to enter into a trusting relationship with the women before screening. The need for appropriate and culturally relevant ways of asking the screening questions has been reported in Japan (Kataoka, Yaju *et al.* 2004) and in the USA (Hindin 2006). The midwives in our study raised difficulties

asking questions in their vernacular which may suggest that any screening tool designed should be culturally relevant.

To the best of our knowledge, this is the first study in Zimbabwe to look at perceptions and experiences of midwives and pregnant/nursing mothers regarding responding to pregnant women for IPV. Further research is needed to understand the non-health system obstacles to IPV responses, such as the views and experiences of the police, courts and organisations that provide care to abused women. The study could have also looked at women's experiences with midwives in detail to better understand the provider-client interface.

Conclusion

The study identified obstacles to responding to IPV in antenatal care at the level of the health system, midwives and pregnant and nursing women and the role of a patriarchal culture that subjugates the needs of women and which in the clinical setting reproduces hierarchies between nurses and patients which further silence women experiencing IPV. The lack of education and skills to screen for violence, the health system's limited human resources capacity and its failure to promote screening, and role conflicts reflecting a deep ambivalence over whether IPV is a health problem, a social problem, or simply 'normal' were identified as the major obstacles to responding to IPV. The study highlighted the importance of antenatal and postnatal care sessions as opportunities to identify and respond to IPV issues. Training and supporting nurses to pay attention to cues in responding, in a sensitive caring way, to IPV may be a more feasible first step than universal screening. Institutional reform that will lead to training midwives and integrating

IPV responses in antenatal care services could help in addressing IPV in antenatal care in culturally appropriate and sensitive ways.

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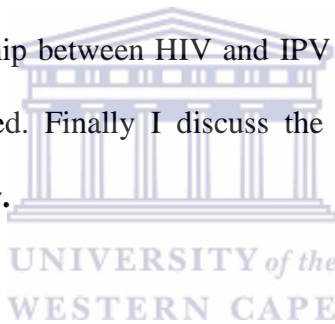


Chapter Ten

DISCUSSION

10.1 Introduction

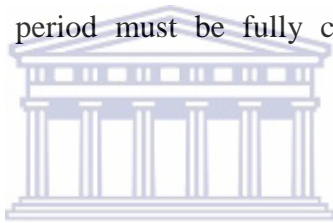
This section discusses the findings in relation to the study objectives and the theoretical framework. The high rates of violence found in the study are first discussed in the context of pregnancy vulnerability. I argue, in this epidemiological and public health work that is situated in the macro and feminist framework, that gender inequities emanating from patriarchal domination of women by men influence intimate partner violence (IPV) during pregnancy. Later, a discussion of the complexity of the relationship between HIV and IPV and how the health sector perceives IPV during pregnancy is presented. Finally I discuss the relationship between past forms of violence and IPV during pregnancy.



10.2 Dynamics of IPV in pregnancy

Both the systematic review and the survey in Zimbabwe found higher rates of IPV during pregnancy. In the systematic review, some variations in the prevalence were noted, with wide ranges (2-57%), possibly because of different cultures and beliefs in the different tribes in which the data were collected in addition to methodological limitations as summarised in Paper I. Torres, Campbell *et al.* (2000) noted how prevalence during pregnancy can be influenced by cultural beliefs among multicultural and different ethnic groups. The survey in Zimbabwe found significantly higher rates of IPV overall compared to previous studies conducted in Zimbabwe and globally. The higher rates which I believe primarily illustrate a systematic use of violence by men to subjugate their partners and a 'culture of violence' in relationships could be in part explained

methodologically as well. Our study referred to the most recent pregnancy with interviews conducted soon after delivery making it easy to remember in an interview. Other studies in Zimbabwe (Watts, Keogh *et al.* 1998, ZIMSTAT and ICF 2012) and elsewhere measured pregnancy violence long after delivery for example up to 5 years after delivery thereby introducing recall bias with non-severe forms of violence possibly not easily remembered and disclosed in the interview. Other studies reporting low prevalence of violence during pregnancy interviewed women while they were pregnant (sometimes early in pregnancy) and possibly missing experiences of violence that took place after the interviews but before delivery (Ezechi, Gab-Okafor *et al.* 2009). Our qualitative research showed sexual conflicts and violence in the third trimester and therefore this period must be fully covered in research on IPV during pregnancy.



Secondly, interviews were conducted outside of the home in a maternal health setting. This setting is mostly associated with greater disclosure compared to home, where women fear to disclose violence to the researcher, in case it will be known to their partners and they would possibly be subjected to further violence (Covington, Hage *et al.* 2001, Dunkle 2004, Alhabib, Nur *et al.* 2010). Our review (Paper I) and another global review of studies on IPV during pregnancy (Taillieu and Brownridge 2010) support this finding. Other factors reported in literature to have an effect on prevalence rates include the level of development, poverty and socio-demographics. For example, interviews conducted in less industrialised and poor communities (Peru, Tanzania and Ethiopia) yielded higher levels of violence in the multi-country WHO (2005) study while having a predominantly poor, younger, and less educated sample was associated with higher levels of violence in the United states (Shumway 1999, Covington, Hage *et al.* 2002), Peru (Perales, Cripe

et al. 2009) and Pakistan (Farid, Saleem *et al.* 2008). The predominantly poor women in our sample with 70% unemployed and dependant on their partners could be another reason for their vulnerability to IPV as previously found in South Africa (Jewkes, Sikweyiya *et al.* 2011). However, the relationship between socio-demographic factors and IPV in our study (Paper II and III) was not very evident as this study controlled for these variables. A more specific analysis will be needed to assess the relationship.

Lastly, the design of the study facilitated more disclosure of violence by utilising an instrument with multiple behavioural questions about a relationship between a woman and a partner. A review of abuse screening tools showed that studies which use few questions and asked questions that make women identify themselves as abused, battered or raped by partners were more likely to underreport violence (Weiss, Ernst *et al.* 2003, Reichenheim and Moraes 2004). The review by Reichenheim and Moraes (2004) noted these limitations of such tools. In addition, the study measured violence during the entire pregnancy period since women were interviewed soon after giving birth which is likely to have increased coverage of violence reporting. Some of the characteristics of the study design which previous evaluations (Taillieu and Brownridge 2010) saw as yielding higher disclosure rates include having qualified and trained interviewers to administer the questionnaire, compared to the self-administering of questionnaires or having untrained interviewers. The interviewers who, on average, were of the same age as the participants (26 years), might also have encouraged disclosure of violence during research, as participants could easily identify with them. In the qualitative study the female research assistant who was also 5 months pregnant was able to use her pregnancy situation to encourage participants to disclose their situations.

The study found one of the highest prevalence of IPV during pregnancy as well as after disclosing HIV status during pregnancy. Although most violence types reported in paper II, III and IV were minor on the scale of violence types (Straus, Hamby *et al.* 1996) the repeated nature of the violence experiences throughout the pregnancy is a cause for concern. The highest number of events reported in our study was 22 out of the possible 39 in our questionnaire schedule with a third of women experiencing physical and or sexual violence at least three times and one in ten experiencing IPV six or more times during the pregnancy. Given that pregnancy is only a period of nine months and that generally pregnancy is confirmed only at the end of the first trimester, the high number of abusive episodes in such a small period of time is a huge concern. Reporting severity of violence based on high frequency of events is a unique contribution of this study to the understanding of IPV during pregnancy. It helps us to view violence as an on-going experience in families or partnerships (Papers II and III) as compared to seeing a woman as either abused or not without information on how often and to what extent. Many past studies measured violence as a once-off event yet the study identified it as an on-going practice in women's lives during pregnancy. It further helps to assess how chronic the IPV problem is so that appropriate ways of addressing it may be instituted. The repeated nature of IPV during pregnancy may have very negative emotional, gynaecological and mental health effects on the mother and negative effects on the baby.

The high frequency of IPV during pregnancy could be explained by the widespread domination of women by men in patriarchal societies. The beliefs and norms which society holds as suggested in our qualitative research are shaped by patriarchy (Paper IV), for example, women in focus group

discussions reported that during pregnancy, men wanted sexual intercourse more than before pregnancy as they felt more pleasure in the woman's 'increased heat inside the vagina'. In contrast, due to the discomfort and pain during pregnancy women generally liked sex less often than before pregnancy thereby increasing complexity, quarrels and conflicts during the pregnancy situation as, reportedly, men will enforce what they wanted.

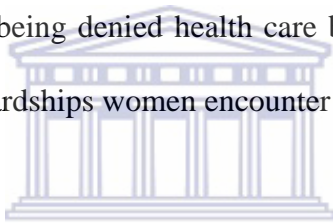
The study contributes to the debate on whether pregnancy increases or reduces violence (Martin, Harris-Britt *et al.* 2004, Taillieu and Brownridge 2010). The results show a different trend than observed by other researchers with increase in the prevalence of sexual and emotional violence rather than physical violence (Paper II and III) although overall, physical and/or sexual violence combined did not differ from pre-pregnancy reports. This is supported by the predominantly sexual and emotional violence reported in Paper IV as in the literature (Martin, Harris-Britt *et al.* 2004). During the qualitative research, sexual and emotional IPV were the most commonly reported forms of violence, hence Paper IV did not focus on physical violence and less physical violence was reported by midwives (Paper V) as was also found with respect to the prevalence of different kinds of violence after disclosure of HIV status (Paper III). This may be explained in several ways. Firstly, based on the traditional patriarchal male domination over women, sexual violence is not usually viewed as violence in marital relationships as men feel that they "own a wife" and that rights over a woman's sexuality are socially transferred to him upon marriage through bride price payment. As noted by Kambarami (2006) it is believed among the Shona people that if a man has extra marital sexual intercourse, it is blamed on the woman who failed to satisfy his partner sexually to stop him from looking for other women. This might have had increased sexual violence during pregnancy. In this study it was shown how pregnancy brought along situations that increased women's vulnerability to sexual and emotional abuse and this was

confirmed in both qualitative and quantitative studies. The decrease in physical violence reported throughout the study (Papers II, III and IV) may be explained by the fear of the negative health consequences such as injuries and fear to lose the baby due to physical harm (Olagbuji, Ezeanochie *et al.* 2010). Indeed, information in the focus group discussions, seem to point that men feared to lose the baby more than anything else.

10.3 Pregnancy as a vulnerable period?

The study contributes to on-going debate on whether pregnancy is a time of respite or vulnerability (Edin 2006, Taillieu and Brownridge 2010). This study shows that researchers must not just seek simplistic answers but rather understand that IPV during pregnancy is a complex phenomenon that is dependent on the social and cultural context in which women live. The WHO (2005) study across ten countries in the world showed that certain countries have different forms of violence that are more prevalent than others. This informs us why the epidemiology of this public health problem must be studied in each setting so that setting-specific interventions may be planned. This study provides the insights for this form of IPV in Harare and Zimbabwe and shows how the pregnancy period brings with it situations that trigger conflict in a partnership potentially leading to more sexual and emotional violence. The physical and emotional changes in women during pregnancy bring with them more demands for more or different economic, social and sexual requirements in a partnership (Edin 2006) which normally place pressure on men who, during the time of our study, were facing economic hardships. As discussed earlier, men use violence when they fail to provide economically in order to feel they remain in charge of the household and the woman since dominance over women provides them with some form of affirming their manhood. For example, a pregnant woman required US\$50 to register for antenatal

care in addition to buying pregnancy and birth related and household items which were very difficult to raise for most men. Paper IV gives an account of a midwife who reported a story of her client whose partner had another wife and abused her in various ways including economic neglect. The woman ended up having pregnancy complications and miscarrying which the nurses suspected was a result of her abuse. In addition, the woman was not able to access maternal fees until she walked a long distance to get money from her brother. She needed the fees to access antenatal and labour care from the public health system and would not have been helped if she had not paid. This example helps to illustrate how multiple factors contributed to women's increased vulnerability during pregnancy. It is important to also note that the woman suffered abuse perpetrated in a health system by being denied health care because of her non-payment of fees. This shows the complexities and hardships women encounter during pregnancy.



Another situation that supports the view that the changed relationship dynamics in pregnancy may trigger violence is testing for HIV during pregnancy. Testing for STI and disclosure of results to an intimate partner were always one of the ways to promote sexual and reproductive health and in the early 1990s before PMTCT was rolled in Africa, a study in Kenya that promoted testing and encouraged disclosure after HIV testing found increased abuse after disclosure. This study later advised women not to disclose (Temmerman, Ndinya-Achola *et al.* 1995). Two decades later with provider-initiated HIV counselling and testing being part of basic antenatal care, most health systems have not made efforts to initiate effective interventions to minimize the risk for abuse after disclosure. Counselling remains the only measure in which risk of violence in partnerships is considered. The gendered nature of HIV testing and disclosure which made women to feel that HIV testing was “compulsory” during pregnancy in the new model of testing called provider-

initiated counselling and testing of pregnant women requires further attention. This approach to HIV testing pressured women to test and disclose their status to their partners for good reasons including prevention of HIV transmission to the baby, partner and avoid re-infection of the infected mother. However, men often refused to reciprocate the prevention process by refusing to test for HIV, and in cases when they tested, they withheld their results leading to conflicts (Paper IV). Such conflicts may have contributed to the high levels of IPV reported in this study (Paper II and Paper III). Studies conducted in Zimbabwe show that only 4% of the women of childbearing age test for HIV before pregnancy (Munjanja, Nystrom *et al.* 2009). It is due to the pregnancy situation that we see about 65% women testing for HIV in antenatal care through the voluntary counselling and testing approach and this increases to almost all pregnant women (99.9%) through the provider-initiated counselling and testing (Chandisarewa, Stranix-Chibanda *et al.* 2007). This places women at a greater risk of IPV after disclosure as disclosure is gendered and is subjected to men's interpretation of the woman being responsible for her infection, with women often being labelled a sex worker. The low testing rates before pregnancy may indicate that women fear problems associated with knowing their HIV status, such as IPV. Therefore the health system must provide adequate options and support to women to ensure HIV testing does not bring unintended consequences like violence. It is regrettable that the opt-out provider-initiated testing approach which encourages HIV testing and disclosure and actually sees almost all women testing, does not provide social care (against violence) after testing.

10.4 The relationship between gender equity and IPV

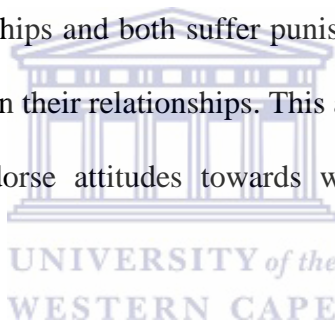
Our results show high levels of gender inequitable beliefs and practices among our participants and their partners as measured on three scales namely attitudes towards wife beating, attitudes

towards sexual abuse and partner controlling behaviours. In addition, high levels of gender inequity in reproductive health were demonstrated by most respondents endorsing that their partners controlled decision-making to become pregnant, to visit antenatal care and to use contraception. Strong associations between all these gender inequity actors and IPV during pregnancy were observed (Paper II). Even stronger associations were observed with severe IPV (Paper II) and severe IPV after HIV disclosure (Paper III). Taillieu and Brownridge (2010) noted that the level of gender inequality in the society has an effect on IPV in general and IPV during pregnancy in particular is also a function of these inequities. There are predominantly unequal gender relations and higher levels of partner control in Zimbabwe with almost a quarter (23.7%) of the women endorsing at least 3 of the 6 partner controlling behaviours in a population survey, while only a third (33.6%) reporting no partner control (ZIMSTAT and ICF 2012). These gender norms are seen in many aspects of Zimbabwean society and it was demonstrated in the way health education lessons to pregnant women were delivered (Paper V). Despite the fact that midwives as health providers had not been sensitised to provide gender-based-violence services to abused women, they unintentionally gave women advice that encouraged women to be abused thereby contributing to the vulnerability of women. IPV during pregnancy could therefore be seen as a function of an unequal society's reproduction of itself with nurses forming part of the system that helps in maintaining the subordination of women. Due to the fact that midwives also came from the same society and held similar beliefs with their client population (Paper V) they also held similar traditions with the male partners who abused the women because of their lack of recognition and awareness on how the health system may prevent rather than promote the violence. This was demonstrated when they advised women not to refuse their partners sex even if women felt they were in pain during pregnancy, as women were responsible to ensure their

partners' sexual pleasure and through this they would prevent partners from seeking sexual intercourse outside the home and invariably decrease risk of HIV infection for both of them.

Women who were abused during pregnancy, were more likely to report being prevented from accessing antenatal care and using contraception. This has been shown to have enormous negative impact on health of pregnant women and their unborn children (Campbell 2002, Heise, Ellsberg *et al.* 2002). This relationship demonstrates the extent of the inequitable gender relations in a relationship. Although our study did not assess the health status of the women who were prevented from accessing antenatal care, there is no doubt that such gender inequity and violence may result in poor pregnancy and health outcomes. Gender inequalities which resulted from the patriarchal domination of men over women's lives were also a result of the worsening economic situation in Zimbabwe during the time of study in which more than 70% women in our study were unemployed and were mostly dependent on their partners (Paper IV and Paper V). Focus group participants described situations in which men used their economic advantage to sexually abuse partners. Evidence from our qualitative research (Paper IV) shows an example of a woman who narrated how it was easy for a man to chase her from the home while pregnant, if she did not consent to his request to have sex. Fear of being chased from home and being divorced by a partner who provides all her economic needs, forced the woman to consent to having sex, despite the woman complaining of painful sex during late pregnancy. The economic situation in which an estimated 80% were not gainfully employed might have eroded men's traditional source of power as heads of households. Feminist theorists have put forward an argument that when men fail to control their partners through the provision of resources in the household, they usually turn to use violence to control women (Jewkes, Sikweyiya *et al.* 2011).

Connell (1987) uses the concept of hegemonic masculinity to explain dominant forms of masculinity in a society which takes on power in relation to women and other non-hegemonic masculinities. While hegemonic masculinity is believed to be contextual in most societies it is powerfully linked to male control and dominance over women, including control over women's sexuality and reproduction. Men dominate women through a complex process in which the dynamics of power inequality are reproduced by both men and women who both continue to perform and are invested in such practices of male dominance and women's submissiveness in patriarchal societies. Because these practices are normative, men and women are both invested in practicing these roles and relationships and both suffer punishment such as social ostracisation if they resist normative gender roles in their relationships. This argument helps us to understand why abused women in our study endorse attitudes towards wife beating, sexual abuse or male controlling behaviours.



The practice in Zimbabwe and other patriarchal societies of socialising women in ways that teach them to be subordinate to their partners is also to blame for the violence during pregnancy. Kambarami (2006) noted that in Zimbabwe's Shona culture, girls are taught how to sexually please their future husbands, and not really to have pleasurable sex themselves. Njovana and Watts (1996) and Watts, Keogh *et al.* (1998) also noted that women were punished for showing that they enjoyed sex too much as it is contrary to norms. Similarly, the double standards in which men are rewarded for being sexual, while women are punished for positively expressing their sexuality and the lack of a positive discourse on female sexuality has been reported in South Africa and globally (Lesch and Kruger 2004, Kahn 2008, Shefer and Foster 2009). The effect of

these gender inequitable practices are reflected in our research in the pregnancy context (Paper IV and Paper V) with women having sex to please their partners and lure them from having other sexual partners not necessarily to please themselves. Women revealed that they forced themselves to have sex because they were sometimes ill, unwilling or uncomfortable to have sex. Midwives, the extended family and the church reportedly strengthened this notion, which saw women falling victims to their partners. This helps us to see how inequitable relationships reproduce themselves. Although the perspective of dominance of gender inequity explains more of the data in this study, there are exceptions of women who were very assertive, empowered and were protected from IPV. The concept of agency in the structure agency theory has been used to explain the power of the disadvantaged to positively influence their lives and empower themselves (Giddens 1979, Long and Long 1992, Long 2001). The concept of agency, is used in this context to refer to the power of women, in a predominantly male dominated context or relationship to resist IPV. This is shown in two examples. Firstly, some participants demonstrated agency by resisting violence and causing male partners to view themselves as being sexually abused. In Paper IV we reported women who could ‘stand their ground’ when it comes to sexual intercourse by having it so many times that their partners felt it was unbearable as they went to work tired all the time. Men could not resist this pressure because women informed them that they were informed by their midwives to have sex several times ‘to help grow the foetus’. In this way, some women successfully negotiated pleasurable sex and illustrated the resistance to a notion that women are asexual and lack a positive discourse on their sexual desires and pleasure which some African feminists have begun exploring (McFadden 2003, Pereira 2003, Lewis 2005, Arnfred 2009, Lewis 2011). In Paper V we also reported that women resisted IPV by refusing nurses’ advice to accept coerced sex. They dropped the nurses’ advice because they felt the advice was wrong and would only lead

them to being abused. One woman rather warned her partner not to abuse her and threatened to report him to the police and health officials if he abused her. Teaching women gender equity may help to resist IPV and negotiate gender equitable relationships. The IMAGE (Pronyk, Hargreaves *et al.* 2006, Pronyk, Kim *et al.* 2008) and Stepping Stones (Jewkes, Nduna *et al.* 2008) studies in South Africa are good examples as they reflect the benefits of gender equity education and increasing access to economic resources in reducing IPV. Although socio-demographic variables linked to poverty were not statistically significant in the quantitative analysis, possibly due to endemic poverty, the qualitative study showed that the woman's low economic position vis a vis the partner's was exploited by abusive partners as women were dependant on their partners. This finding is supported by the evidence that economic emancipation can help to reduce women's vulnerability and violence. In South Africa, vulnerable women's access to the child support grant has been evaluated and results show its ability to reduce women's vulnerability (Goldblatt 2005) while in Peru, the Juntos programme of cash transfers was successful in tackling child poverty and vulnerability (Jones, Vargas *et al.* 2008).

The findings in our quantitative survey are supported by the information from the qualitative research in that the HIV positive women who had had three or more sexual partners in their lifetime were less likely to report IPV compared to those who reported fewer sexual partners. These more sexually experienced women could have been more assertive given their sexual experiences that they could also 'stand their ground' and resist violence from their partners. It could also be that having had many partners before she had learnt to select a less or non-abusive partner who possibly understood her HIV positive status hence less abuse. These cases

demonstrate agency in a society dominated by the patriarchal structure which thrives on gender inequities and violence in relationships. While more research is needed to understand male control during pregnancy in detail, improving partners' communication and non-violent conflict negotiation skills in relationships is urgently needed to reduce the use of violence in conflict management.

10.5 IPV, HIV and sexual risk

The relationship between HIV and IPV is complex and difficult to understand especially in a cross sectional study. We found IPV associated with risk factors for HIV infection and effects of HIV testing, that is, disclosure, but not HIV status itself. We reported a higher prevalence of HIV and a higher prevalence of IPV in our postnatal sample. The higher prevalence of HIV in antenatal care reflects the situation in the country as a higher prevalence country in general (15%) and among 15-49 year age group (17.7%) (ZIMSTAT and ICF 2012). Although we reported positive associations between HIV and IPV in Africa in five out of the eight papers in our systematic review (Paper I), three papers did not find an association, possibly due to methodological limitations in the papers such as small sample sizes which could not detect differences (Ntaganira *et al.* 2006), or assessed HIV variables as reported in the interviews. In addition, we did not find an association between HIV status diagnosed during pregnancy and IPV experiences during pregnancy in the current Zimbabwean survey (Paper II). There could be other explanatory variables that we did not measure that led to this insignificant association or that the sample size was not adequate to show significant difference. Three different studies that analysed recent demographic and health survey data across the globe and in Zimbabwe in particular did not find an association between IPV and HIV (Harling, Msisha *et al.* 2010, Ngwaru 2010,

Nyamayemombe, Mishra *et al.* 2010, Kayibanda, Bitera *et al.* 2012). However, these demographic and health survey based studies were limited to ever married women and last 12 months IPV and we cannot directly compare our results to them but the fact that the studies including one in conducted in Zimbabwe found similar results add to the complexity of IPV and HIV relationship. Although it is difficult to draw conclusions on this finding, we assumed that the high prevalence of both phenomena in the population make the association difficult to find. It may also be explained by the fact that we do not know when the women were infected by HIV although we know the time of abuse was during pregnancy. In addition, it should be noted that the true association between HIV and IPV may only be measured in longitudinal studies in which cause and effect relationships are observed over time. However, sexual risk factors for HIV were found associated with IPV. This may suggest that the association between IPV and HIV is through risky sexual behaviours such as having multiple sexual partners and previous STI infections which we consistently reported (papers I-V). This is consistent with literature on previous studies conducted in South Africa (Dunkle, Jewkes *et al.* 2004, Jewkes, Dunkle *et al.* 2006).

Although HIV status and IPV were not found to be associated during pregnancy (Paper II), the two were linked after women disclosed their status to partners with more HIV positive women reporting physical, sexual and/or emotional abuse (40.5%) than HIV negative women (31.5%) ($p=0.004$) (Paper III) and that more HIV negative women disclosed than HIV positive women for fear of violence. As reported in previous studies (Nebié, Meda *et al.* 2001, Maman, Mbwambo *et al.* 2003, Medley, Garcia-Moreno *et al.* 2004) and our qualitative research (Paper IV, Paper V) the fear of a partner limits disclosure and an HIV positive status brings conflict, quarrels and IPV disclosure of HIV status. This fear to be abused after disclosing an HIV positive status, leads

women to withhold their results, because a positive status triggers discussions and accusations of past sexual history as HIV status is often linked to trust, faithfulness and loyalty to partner (Obermeyer, Baijal *et al.* 2011). We found that HIV prevention education at the antenatal care clinics were potential sources of conflicts in relationships when women insisted on safe sex which men often refused despite not being tested and when midwives emphasized HIV prevention ways that disregarded consensual sexual intercourse (Paper IV, Paper V).

While disclosure is recommended in health settings for prevention of HIV transmission in relationships, it brings with it violence against women. Women are vulnerable to IPV after disclosure because they are the ones who must disclose as men rarely test or do not want to test or if they tested would hide results of the test (Paper IV). The gendered nature of HIV testing and disclosure therefore need to be considered when encouraging women to disclose. The invisibility of IPV in the health system requires further discussion. While health workers emphasize HIV disclosure to a partner, there is insufficient assessment or consideration of the unintended consequences of the disclosure process. The link between disclosure of HIV status and IPV (Paper III) is supported by findings from our qualitative research (Paper IV, Paper V). Where women reported that they faced abuse when trying to negotiate condom use after testing positive, a midwife reported the following:

“They do not come in the open when it comes to the issue of sex after HIV tests. They take condoms in fear because they say, “I will be beaten up at home if he finds condoms in my bag”. They want to consult with partners first before taking condoms. Their partners accuse them of prostitution if they find them with condoms” (Midwife in Paper V).

The complexity of the relationship between HIV and IPV was demonstrated when midwives were preoccupied with prevention of HIV at the expense of IPV, rape specifically. Midwives advised

women who complained of sexual abuse by partners at a time they felt they could not have sex that they should offer themselves for sex to their partners to stop their partners from seeking sexual intercourse from other women (Paper IV). This shows the health sector's poor recognition of how their teaching to pregnant women increases abuse or contributes to IPV when addressing HIV prevention yet the two are linked in some way. There is therefore need to integrate IPV prevention in HIV prevention programmes during antenatal care, so that the two may be tackled simultaneously.

Another interesting finding in our study is that a large proportion of HIV negative women were abused (31.5%) after disclosing their HIV status, although they were fewer than HIV positive women (40.5%) (Paper II). Although this may have been due to the generally high prevalence of abuse in the population, our qualitative research (Paper IV) shows that despite testing HIV negative, women faced violence when they asked partners to test as well. Sexually risky men were often reportedly refusing to test and this fuelled conflicts and the abuse of women. We reported a case of a woman who struggled to convince her partner to test after she tested negative. She even stopped having sex with him but the partner forced her to have sex until she gave in. This shows that in cases where male partners' statuses were not known or were suspected to be positive, a woman's disclosure of her negative status was a source of conflict. Reports of men who tried to infect their partners by taking off condoms during sex after a woman tested negative cannot be ignored given the high prevalence of HIV negative women reporting abuse after disclosing HIV status. Further dedicated studies of IPV among discordant couples are needed to understand this further. In a broader sense, gender inequality explains why many HIV negative women were abused as men controlled most decision-making in relationships.

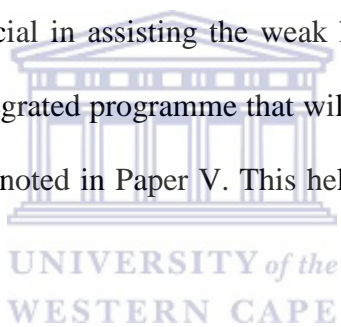
10.6 Intimate partner violence and the health system

We aimed to study the dynamics of IPV and explore the perceptions and experiences of health workers regarding IPV against pregnant women. Our study demonstrated that the health sector (through midwives) largely perceives IPV as a domestic and non-medical or non-health problem that must be dealt with outside of the health system preferably at home using traditional structures including the aunts. The study shows that midwives were not trained to recognise and deal with abused women as it was not in their clinical training and service guidelines, despite some of them recognising and recommending integrating IPV in their health service (Paper V). This is in line with previous findings (Edin 2006). Midwives as such regarded IPV as a problem that does not fall under their medical jurisdiction. This is in a context where globally, gender-based-violence has been recognised as an important problem and research has consistently raised it high as a problem that could be addressed in health care situations as it significantly contributes towards mortality, injury and morbidity (Campbell 2002, Norman, Chopra *et al.* 2007, Seedat, Van Niekerk *et al.* 2009).

Given the high rate of ANC coverage (90%) in the country (ZIMSTAT and ICF 2012), it will be helpful to identify and assist women at high risk of IPV during antenatal care at least through referrals to specialized gender-based-violence organisations. This would require firstly, sensitizing the nurses about gender-based-violence so that they may recognise cues among women at high risk following the example in South Africa (Joyner and Mash 2011, Joyner and Mash 2012). This may be done at less cost in the resource limited contexts unlike the routine screening of all women which may not be feasible in developing settings (Laisser, Nyström *et al.* 2011, Scribano, Stevens

et al. 2011) such as Zimbabwe as it requires reframing what is perceived as a complex, sensitive, and private matter as a health problem and equipping both staff and the health system to address it. Routine screening for partner violence is thus closer to the major challenges that HIV posted, than to routine screening for medical problems such as STIs. It is likely to be both complex and expensive as it may require more specialised services including counselling either in the health system or non-governmental organisations specialising in prevention of gender based violence.

The devastating effects of IPV during pregnancy on the health of the mother and the unborn child require concerted efforts to deal with the problem. We showed in Paper V how the work of non-governmental organisations is crucial in assisting the weak health sector in dealing with abuse. What is required is a sustained integrated programme that will seek to work with specialized non-governmental organisations as we noted in Paper V. This helps to reduce the effects of abuse on women and their unborn children.



The finding that a significant proportion of women reported being prevented from using contraception, visiting antenatal care and that decision-making to become pregnant attracts less violence when done by male partners only (Papers IV and V) requires that health workers pay greater attention to gender equity and gender-based-violence in reproductive health issues. A more meaningful way of integrating men in reproductive health issues would also help to address this situation. This may be done by strengthening male participation in antenatal care interventions. In South Africa, the involvement of men in IPV prevention interventions has made dramatic inroads in IPV prevention (Peacock, Stemple *et al.* 2009).

10.7 Past abuse and abuse in pregnancy

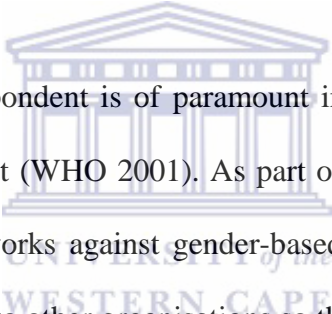
We measured the prevalence of women's past experiences of violence which include forced first sexual intercourse, child sexual abuse, child abuse (physical and/or sexual) and IPV in the last 12 months before pregnancy. We assessed their relationship of these past forms of violence with IPV (and severe IPV) during pregnancy, severe IPV and IPV after disclosing HIV status. We also measured men's previous use of violence with other men in the community since he partnered with our respondent. We found the prevalence of forced first sexual intercourse (15.5%) comparable to that found among pregnant South African women attending antenatal care in low income urban areas (12.4%) (Dunkle, Jewkes *et al.* 2004a) and among adolescents in Uganda (14%) (Koenig, Zablotska *et al.* 2004). It is difficult to make direct comparisons with DHS data in Zimbabwe which is the only available data in the country about forced first sexual intercourse. However, if being tricked into having sex was considered as forced first sexual intercourse in my study to be as inclusive as the DHS definition (21.6%) the estimate (18.9%) will be in the same range with that of the DHS (ZIMSTAT and ICF 2012). Since coerced first sex predicts violence in later adult life interventions should be implemented to prevent coercion in early life.

While previous studies reported an association between past forms of abuse and IPV in general without specifically focusing on violence during the time of pregnancy (Jewkes, Penn-Kekana *et al.* 2001, Maman, Mbwapbo *et al.* 2001a) we examined whether prior exposure to violence both as a child and as an adult were associated with experiencing IPV during pregnancy. The study consistently found IPV, severe IPV during pregnancy and severe IPV after HIV disclosure strongly associated with all forms of past violence (forced first sexual intercourse, child sexual abuse and child physical and /or sexual abuse and IPV in the last 12 months before pregnancy)

(Paper II and Paper III). The results suggest that abuse in pregnancy is not an isolated incident in a woman's life but appears to be part of a lifetime process as it is associated with abuse before age 15, forced first sexual intercourse which on average took place at 18 years and past year violence (the average age at previous year was 25 years). The concept of re-victimisation may be used to draw conclusions why previously abused women are more likely to report abuse again in their adulthood (Dunkle, Jewkes *et al.* 2004a). The social learning theory (Bandura, Ross *et al.* 1961) postulates that behaviour, whether positive or negative, is socially learned and therefore if children are exposed to violence, they will learn to use or accept it as a measure to discipline misbehaviour in later life. Although the thesis was not an interrogation of the social learning theory, the theory was a useful framework for understanding some of the linkages and continuities across generations. Social learning theory may therefore be used to model good behaviour, in this case, gender equitable behaviour among both boys and girls so that they grow up with decreased chances of being abused. It is sensible therefore to target prevention of violence in childhood to reduce vulnerability in adult life. Previously abused women need to de-learn or to be re-socialised in the use of positive conflict management skills as has happened in the IMAGE study (Pronyk, Kim *et al.* 2008). The IMAGE study stands as a good example of how previously disadvantaged women can be economically empowered resulting in reducing gender inequalities and their vulnerability to violence. Secondary prevention interventions could therefore target women in antenatal care, for example through the use of health education talks by midwives to impart knowledge about gender equitable relationships.

10.8 Challenges of researching gender-based-violence during pregnancy

Many researchers have written about challenges and ethics of researching violence against women (Jewkes, Watts *et al.* 2000, Campbell and Dienemann 2001, Ellsberg, Heise *et al.* 2001, WHO 2001, Ellsberg and Heise 2002, Fontes 2004, Jansen, Watts *et al.* 2004, Cramer, Hammond *et al.* 2011, Sikweyiya and Jewkes 2011, Jewkes, Sikweyiya *et al.* 2012, Rasmussen 2012, Sikweyiya and Jewkes 2012). None of them focused specifically on researching IPV during pregnancy. This section discusses some of the challenges that were specific to researching IPV during pregnancy in a postnatal setting although some of the challenges are similar to researching violence against women in general.

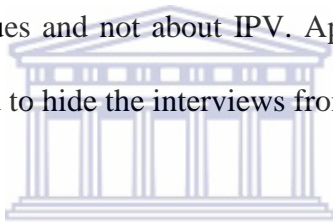


The safety and welfare of the respondent is of paramount importance in any study on violence against women and must come first (WHO 2001). As part of the study, the researcher organised with a leading organisation that works against gender-based-violence and manages shelters for violence survivors in Harare and two other organisations so that participants may be referred there for help. All women that were interviewed were given information about these organisations and were offered a pamphlet with contact details of these organisations. However, until the end of the study no increase in clients, due to our research referrals, at these organisations was observed. There is need for a follow-up study in Zimbabwe on this issue. In South Africa, it was found that participants rarely visited professional counselling organisations they were referred to, as they preferred to consult family members/relatives when need arose (Sikweyiya and Jewkes 2011). This may show women's reluctance to report their abusers as confirmed in Paper V. However, the centrality of referring women to professional counselling organisations still need to be understood in greater detail in Southern African settings where the culture of visiting non-relatives for

counselling is not as developed as it is in the Western countries which emphasize professional counsellors..

One of the often neglected ethical issues in researching violence against women is the safety and welfare of the researcher (Sikweyiya and Jewkes 2011). We anticipated challenges on researcher welfare due to traumatic stories of abuse narrated by women to research assistants. Our workshop to train research assistants upon recruitment was focused on and based on the WHO recommendations on researching violence against women and girls (WHO 2001) and included a researcher focused session on conducting research in gender based research and another session on vicarious trauma led by a clinical psychologist. This enabled researchers to prepare themselves ahead of some of the traumatic situations faced in the field. Although the study employed qualified research assistants with some previous experience in social and gender related research whom we also trained, the sensitivity of researching abused pregnant women, a number of them HIV positive together with their babies, were sometimes overwhelming to the research assistants. Research assistants felt disturbed by the stories narrated by some respondents. We sometimes offered a day-off to assistants who needed to rest or to consult the psychologist. We conducted daily short debriefing sessions when research assistants submitted their daily outputs. In the middle of the study we organised a half day debriefing session with a clinical psychologist followed by an informal braai outing. The session focused on the challenges facing the fieldworkers fashioned like a group counselling session. The study availed the services of the psychologist throughout the research period so that if any researcher wanted to consult they could do so although no research assistant made any appointments with the psychologist.

Conducting the study in a health setting provides greater safety to respondents than when the study on violence is done at home. This is because the perpetrator is likely to know about the study and this will further put women at greater risk of IPV. However, the unexpected presence of the respondent's partner at the clinic during the study (because men hardly accompanied their partners) is also a concern to the research and safety of women. Some of our respondents who accepted to participate in the study did not inform the researchers that they were accompanied by their partners who were around the clinic but not in the session. Sometimes research assistants would only recognise that the partner was available when he came to check if his partner was done with the consultation. In such cases our assistants would then begin using the dummy questions about general health issues and not about IPV. Applying the WHO regulations in this manner was helpful as we managed to hide the interviews from the partners.



Although, based on our ethics procedures, we informed our respondents not to disclose their HIV status during focus group discussions and reminded them of this ground rule, we had situations in which participants unconsciously disclosed their HIV test results. Of these disclosures, most were negative. Such disclosures were made when they narrated how their partners reacted to their disclosures or when they discussed whether men participated in testing for HIV during the women's pregnancy. However, we did not see any woman who got disturbed by such disclosures. The sensitive nature of the study led to many respondents shed tears during the study and each time this happened, the researcher would remind the respondents that if they wanted to leave the interview they could do so but we did not have any that terminated the interview prematurely because of that. A few incomplete interviews (n=28) were mainly due to other reasons such as the baby crying and needing attention or the women having to re-join the clinic queue. Our

experience with respondents who shed tears was that they wanted to disclose the incidents as much as they could. A number of cases of those who shed tears mentioned at the interview that they felt better after sharing their experiences with the researcher. This is in agreement with previous findings (Jewkes, Watts *et al.* 2000, WHO 2005). Our questionnaire evaluation questions show an overwhelming majority (66%) responding that they felt happy to have been interviewed, while nearly a third reporting no change and less than 1% felt that their situations were made worse by the interview. We offered a pamphlet with contact details of organisations that help women facing abuse.

Being a male researcher in a female environment also calls for discussion. I specifically led some sessions of focus group discussions with a research assistant, but did not generally feel that women shy away from discussing their situations. The plan for the fieldwork was that I would give the task to the female assistant to conduct the interviews if women refused to discuss GBV with me. One of the plans was, due to the sensitive nature of the study, to ask respondents to narrate their personal stories in third person language. However, it is interesting to note that women appeared to feel free to talk about violence and disclose their personal situations. It was in only one discussion when for a few minutes we (research assistant and I) switched roles with the research assistant. One of the lessons I learnt from conducting the study, is that abused women appear to feel very free to disclose their situations in a safe environment, as they feel relieved because many found it a good opportunity to tell someone about their personal violent experiences. We verified this when women agreed that during pregnancy it was difficult to report to a relative. They reported that if they told a relative they were likely to be told that it was part of womanhood, and that was how marriage unfolds and that they must endure such situations.

Chapter Eleven

CONCLUSIONS

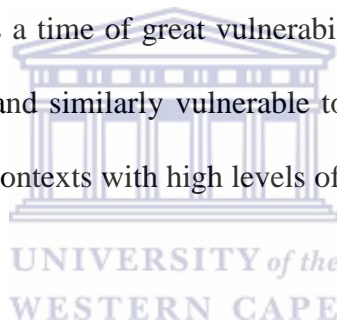
11.1 Conclusion

This study provides a new finding of high prevalence of IPV during pregnancy. The prevalence figures were supported by respondents' descriptions of how common violence was during FGDs. In addition, the study used severe violence measures which, to the best of our knowledge, have not been used before. Severe IPV in our study gives a clearer picture of the extent of violence women face during pregnancy. This is a step forward in understanding violence not as yes/no variable but in a continuum of severity- from no violence to multiple violence episodes- helps to determine more accurate conclusions on its associations with other variables than if it is taken as either present or absent. This is because a yes response to having ever been abused during pregnancy may not necessarily differ from no response to abuse in terms of their effects and it does not tell us much about the relationship. The study also found that a more comprehensive definition of violence which nevertheless distinguishes locally acceptable levels of conflict from violence and abuse elicits a very high level of violence, higher than in studies which used narrower definitions of violence.

Our study is the first to systematically measure IPV after HIV disclosure which was the highest ever reported in the world. Prior studies reported a number of negative effects of HIV disclosure including IPV, but with no clear definitions and measurements. Our study reports high rates of disclosure of HIV status contrary to previous review studies which concluded that developing countries report the lowest disclosure rates. Although we did not find an association between IPV and HIV status in multiple logistic regression analysis, most violence types were related to HIV

status in Paper III, our study found many ways in which HIV may be linked to IPV and these include through disclosure of status - whether positive or negative, and linkages through sharing similar risk factors which include sexual risk factors (multiple sexual partners, history of STI infection).

Our study adds to existing literature, new knowledge about how gender inequities are associated with IPV during pregnancy. We also contributed to the debate about whether pregnancy is a time of vulnerability or relief among women. Our study found that pregnancy brings with it more vulnerable situations for abuse by male partners in an unequally gendered society. However, we also found that while pregnancy is a time of great vulnerability, physical violence decreases and that not all women are generally and similarly vulnerable to violence but that others 'can stand their ground' to resist violence in contexts with high levels of male dominance and perpetration of violence.



The high levels of IPV clearly lend support to the notion that IPV during pregnancy must be addressed in both primary and secondary prevention mechanisms. Midwives and public health practitioners cannot ignore violence during pregnancy. Provision of knowledge through campaigns for gender equity targeting women attending antenatal and postnatal care services could help educate and empower women against partner abuse. Community based interventions targeting men and the broader society aimed at changing inequitable gender norms may be used to target reducing intimate partner violence.

11.2 Strengths of the study

The use of the mixed methods approach helped to better understand violence as a social, human rights and public health problem. The qualitative research which mainly used in-depth interviews and focus group discussions helped in the design of the questionnaire for the quantitative study as well as in understanding and explain quantitative data. For example, an understanding of why higher rates of abuse were reported by HIV negative women was only possible with information from the in-depth interviews and focus group discussions. Understanding violence from the perspective of women themselves and midwives who see pregnant women in antenatal care, helped to engage with views from people in the health sector. I was able to understand why women endure abuse during pregnancy without any help from the health sector. I conducted the quantitative study after fully engaging with data from the qualitative study, enabling me to carefully select and define variables of importance in understanding IPV during pregnancy. I also explained in the thesis the importance of interviewing postnatal women to understand their experiences during the whole nine months of pregnancy.

The study had a large sample size which enabled analysis of many variables and sub-analysis of different phenomena. This is the first study in Africa about IPV during pregnancy with a large sample size. The large sample size enabled us to analyse rare phenomena such as HIV positive women only in multivariate logistic regression model. This was not possible in many of the studies we reviewed (Paper I). Prior studies lacked the power to conduct adjusted multiple regression analysis without limitations.

As highlighted earlier, the strength of the study also was in the validity and reliability of the study process, including piloting the study tools and use of trained female fieldworkers. One of the notable strengths is the very high response rate (97%). We approached nearly all women presenting at the clinic and our results may therefore be generalised to all postnatal women in public urban clinics in Zimbabwe.

11.3 Study limitations

The study has several limitations. The study was health facility-based focusing on postnatal women during pregnancy and findings may not be generalised to all pregnant women because pregnant women who seek postnatal services may differ in exposure to IPV from women who do not seek postnatal services. Although we interviewed women who attended the 10 days postpartum visit, as a near representative sample of recently pregnant women, we still missed women who aborted, miscarried or were in other circumstances that prevented them from attending a postnatal clinic. Pregnant women who experience violence may be underrepresented in this study because some may have been prevented from visiting health care facilities by their partners. However, contrasting evidence suggests that abused women are more likely to seek health care than non-or-less abused women (Campbell 2002, Raj, Santana *et al.* 2006). This may therefore suggest that data from this study may be generalised to abused pregnant women. The study was cross-sectional and therefore limited in giving time variations. The study could only limitedly draw causal explanations for our major variables due to the cross sectional nature of the study. Nevertheless, the study was able to track the life course of IPV and other violence types in our sample of women by asking questions on lifetime experience of IPV, IPV during pregnancy and after testing for HIV in order to get some trends and dynamics of IPV during and across

pregnancy. In addition, focus group discussions that were held with women and interviews held with health workers helped to complement data from the interviews and to offer some explanations on certain behaviours and exposures to violence.

The study did not include men's explanations from focus group discussions. Men's views could have assisted in understanding violence from their perspective and to better understand gender equity, violence and sexual risk factors. Although women are unlikely to overestimate their experiences of violence (Campbell 2004) and that the study also collected views of midwives, an understanding of men's views could have been sought to triangulate data. The study interviewed women about their IPV after disclosure of their status but did not verify if the violence was because of HIV tests or other reasons. An assumption was therefore made that the violence was as a result of disclosure. In addition, there may have been some form of confounding in the measure of IPV after HIV disclosure. Firstly, violence after disclosure may be closely linked to the generally high levels of violence reported in the study area by respondents. The high levels of violence among HIV negative women are an example. Secondly, the factors that resulted in the woman acquiring HIV may have been responsible for those that led to the women being abused and similarly, the factors associated with the women's protection from HIV may have been responsible for them not being abused. However, since we adjusted for past violence in the regression analysis, the effect of past violence in determining the relationship between IPV after disclosure might have been considerably reduced in the models.

The meta-analysis in Paper I yielded high heterogeneity (99%) in the meta-analysis and this calls for readers to interpret the overall prevalence with caution. However, the range of prevalence

across the studies helps us to understand better the picture of prevalence during pregnancy across Africa. The multi-ethnic regions in which the studies were conducted in Africa may also help to explain the differences leading to the wide ranges in addition to the methodological variations explained earlier.

11.4 Recommendations and policy implications of the study

11.4.1 Primary prevention of violence in the family and at school

The family and school institutions where children are mainly abused could instead be used to socialise children with gender equity and non-violent conflict management skills. This merits careful consideration because the reported high levels of IPV during pregnancy and after HIV disclosure were strongly related to past forms of violence including child abuse, forced first sexual intercourse and past adult abuse. Positive methods of discipline could be taught in schools to create a culture of non-violence. This helps to ensure boys and girls grow up with strong gender equitable attitudes, beliefs and practices and the use of non-violent conflict management skills. The school is potentially a platform to teach learners about the economic, physical, sexual and emotional changes associated with women during pregnancy. This also includes shared decision making to become pregnant. The school system has an advantage of reaching out to almost all children given the high literacy and enrolment levels reported in the study.

Children may also be vulnerable and abused due to their poor socio-economic situations. Improving their conditions of living through introducing and strengthening the implementation of child support grants to vulnerable urban children beyond educational support can be instrumental in empowering them. This in turn may change their situations and help prevent violence as reported in Peru (Jones, Vargas *et al* 2008).

11.4.2 Secondary prevention of violence through the Health system

I recommend that the health system recognizes IPV during pregnancy as a public health problem and institute low cost and less time consuming interventions in antenatal care. Health workers could be sensitized through short (eg one day) training in gender based violence to be able to recognize and respond to high IPV risk cases through referral to relevant organizations. The health system could work with non-governmental organisations specialising in gender based violence prevention. Such organisations could be invited to give routine short health talks at the clinics to help empower women with education about preventing gender based violence. HIV counselling should incorporate basic IPV counselling in their sessions. In addition sensitized midwives can utilize group health education talks in antenatal care to cover IPV prevention and support services for abused women such as counselling. I also recommend that the health system works with relevant anti-gender based violence nongovernmental organisations to capacitate the health system and giving IPV prevention talks during antenatal care sessions whilst women wait to be seen. Scrapping of antenatal and labour user fees may help to reduce women's vulnerability towards IPV as this contributes towards alleviating women's dependency on and abuse by their partners. The Ministry of Health and the City Health Department must find other ways of funding maternal health system that does not make women pay in these clinics. This is because it makes the poor and usually unemployed women more vulnerable to abuse by their partners whom they depend on for their daily economic livelihoods as well as for care in regard to their pregnancy. Strengthening ways in which men can participate in HIV testing is also required in the provider initiated counselling and testing so that IPV issues could be explored in the sessions which is attended by both partners. Disclosure of HIV to partners must continue as a way of preventing HIV. However, health workers must provide IPV counselling so that women are not abused after

they disclose. The National Family Planning Council could also respond to IPV by introducing issues of IPV in their counselling and emphasizing on shared decision making in pregnancy planning.

Integrating and strengthening IPV prevention in the public-private HIV partnerships in the rights and HIV related organizations can be used. The structures and relationship between government and the civil society which successfully contributed to reducing HIV prevalence in Zimbabwe could be used to influence IPV behaviour change as well. The momentum, skills and structures for HIV prevention could be used to challenge gender inequality with respect to IPV. Men's organizations and programmes could be used to challenge unfair patriarchal domination of women by men and IPV. Community campaigns at drinking places could be used to target IPV so that men are socialized with non-violence. Televisions and pamphlets could be used to disseminate messages of gender equality and non-violent conflict management skills at drinking places. These could sensitize men to sexual and reproductive health including the physical, sexual, emotional and economic changes that are associated with pregnancy.

Although the relationship between HIV and IPV was not evident in the study even with severe violence, we found that HIV positive women reported more abuse than was reported by HIV-negative women and this was supported by information from the qualitative study. Since most women who test positive are referred to support groups for more knowledge, information and support on positive living, I recommend that gender equity and gender based violence be considered a central topic in the HIV and AIDS support groups. This could go a long way empowering women to prevent further violence. Since most women test for HIV at their first

antenatal care visit, women could be quickly referred to and enrolled in support groups to help with disclosing their HIV status and living healthy and non-violent lives with their partners.

11.5 Further research

Longitudinal studies are needed to measure IPV throughout the pregnancy and soon after pregnancy, while also considering disclosure and violence resulting from disclosure. This will allow measuring specific acts of violence resulting from HIV disclosure to be measured. It is through longitudinal studies that we may determine cause and effect relationship. Including men's views in studies of violence against women would contribute to understanding the dynamics of IPV much better. The study found that women do not report IPV to the police or the courts and that prosecutions are not likely despite high levels of violence. Further studies must research on tracking the justice cascade from abuse in the partnership, police reports, and courts through the finalisation of cases. This could help to understand in detail why women do not report violence and what happens if they report violence. If perpetrators are brought to book, this could send a signal to the community and possibly help to reduce violence perpetration.

11.6 Next Step: Dissemination and advocacy work

It is critical that research findings are disseminated to relevant stakeholders to increase awareness among the general public and help influence policy and interventions. To this end, the researcher developed a plan for dissemination whose implementation is underway. Some of the findings of the study have been disseminated at both international and local conferences. A list of conference presentations is included in Appendix L. A dissemination workshop will be organised in Harare, Zimbabwe and this will bring together relevant stakeholders (Ministries of Health, Women's Affairs and Social Development, HIV and women's organisations, Harare City Health department

and activists, and academics, practitioners, women and men). Results will also be presented at the forthcoming National HIV/AIDS conference in Zimbabwe. A press conference will be organised and broadcast on national television, radio and news agencies as part of the dissemination plan. Key results will be translated into a brief pamphlet together with relevant NGOs and will be distributed to the public through non-governmental organisations and antenatal care settings in the clinics.



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13.0 APPENDICES

Appendix A: Ethical Considerations

Introduction

The study procedures followed the WHO (2001) Ethical and Safety Recommendations for research on domestic violence against women. The guidelines help researchers in collecting and managing sensitive information which include intimate partner violence. Since many women prefer to share such information with women, the researcher recruited female interviewers based on their attitudes towards gender based violence, sexuality and HIV (Dunkle et al 2003). Interviewers were trained for 7 days on researching violence against women and research skills paying emphasis on ensuring safety of the participants and interviewers, minimising underreporting of violence, avoiding reproducing women's inferior status and handling confidential information.

Risks

There might have been some minimal psychological risks in participating in the study. By asking women to recall and recite acts of violence perpetrated on them, some of them still traumatic, some women might have become stressed and/or burdened. Interviewers were vigilant to avoid burdening participants through the recruitment and interviewing processes. They also made sure they avoided reproducing women's inferior status during the interview process. The study aim did not override the rights and welfare of the women and women therefore were informed that they could discontinue the interview should they feel uncomfortable. The researcher worked closely with Musasa, a non-governmental organisation specialising in prevention of gender based violence and rehabilitating victims of gender based violence. Musasa had qualified and experienced staff who counselled and supported victims of gender based violence. The organisation also ran shelters for survivors of gender based violence. Participants were referred to the Musasa Project and two other similar organisations for assistance.

Benefits and Compensation

All women who participated in the interviews received a leaflet with information and contact details of organisations they could contact should they require assistance and counselling on gender based violence and HIV. They also benefit by getting an opportunity to tell someone about abuse in their lives, an opportunity some only got in the study. They received some refreshments during the discussion. Other participants who reported economic abuse were referred to the clinic staff who registered them to receive food hampers and other assistance required by new mothers which were provided by a nongovernmental organization at the clinics.

Confidentiality

This was assured during recruitment and interviews. Interviews were conducted in a private space at the clinics. Privacy was maintained in the conduct of the interviews, management and use of data and participant identity was kept confidential. In focus group discussions participants were instructed not to disclose their HIV status. All data were kept under lock and key where they were only accessed by the research team under the supervision of the principal investigator. Information on HIV status from the records was number coded to protect participants' names outside the facility. Participants and clinics were therefore represented by numbers and pseudonyms in the study..

Informed Consent

During the recruitment process women were informed about the study aim, their right not to participate and that participation or non-participation in the study would not adversely affect their access to health services in the facilities. This was maintained throughout the study. Written informed consent (and assent for the women below 18 years old) was sought for participation in the study. Participant written consent was requested and provided for the researcher to access the participants' clinical records that include HIV test results.

Voluntary Participation

All potential participants were informed that their participation in the study was voluntary and that they were free to withdraw at any time if they felt uncomfortable to continue with the interview.

Ethical Clearance and Permission to conduct the study

Ethical approval was sought from the University of the Western Cape Senate Research Committee, the University of Zimbabwe's Joint Parirenyatwa Hospital and College of Health Sciences research ethics committee and the Medical Research Council Research Ethics Committee. Permission to conduct the study at the facilities was sought from the Harare City Council Health Directorate and each facility superintendent.



Appendix B: Ethics Approval from the Joint Parirenyatwa Hospital and College of Health Sciences Research Ethics Committee

UNIVERSITY OF ZIMBABWE

COLLEGE OF HEALTH SCIENCES

MEMORANDUM

FROM: Chairman, Joint Research Ethics Committee **DATE:** 9 Feb 2010

TO: Mr S Shamu, Department of Community Medicine **EXT:** 2239/2242
c.c: Chairperson, Department of Community Medicine

RE: **THE DYNAMICS OF INTIMATE PARTNER VIOLENCE (IPV) AND THE RISK OF HIV AMONG PREGNANT WOMEN IN ZIMBABWE – JREC/48/09.**

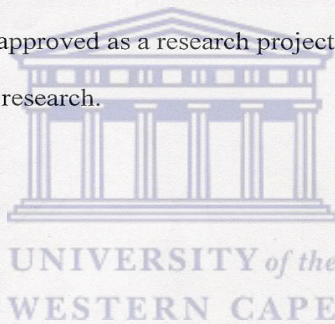
Thank you for your application with the above mentioned title seeking approval from the Joint Parirenyatwa Hospital and College of Health Sciences Research Ethics Committee (JREC). The Committee has successfully evaluated and discussed the corrections you supplied.

It was agreed that your application be approved as a research project which is ethically sound.

Wishing you an enjoyable and fruitful research.



Prof M.M. Chidzonga



Appendix C: Ethics Approval from the Medical Research Council of Zimbabwe

Telephone: 791792/791193/792747
Telefax: (263) - 4 - 790715
E-mail: mrcz@mrczimshared.co.zw
Website: - www.mrcz.org.zw



Medical Research Council of Zimbabwe
Josiah Tongogara / Mazoe Street
P. O. Box CY 573
Causeway
Harare

MRCZ APPROVAL LETTER

Ref: MRCZ/B/114

Date: 27 October, 2010

Simukai Shamu
UZ-CHS
Dept Of Community Medicine
Box A178 Avondale
Harare

RE:-The Dynamics Of Intimate Partner Violence (IPV) and the risk of HI among pregnant women in Zimbabwe


Thank you for the above titled proposal that you submitted to the Medical Research Council of Zimbabwe (MRCZ) for review. Please be advised that the Medical Research Council of Zimbabwe has **reviewed** and **approved** your application to conduct the above titled study. This is based on the following: -

- (a) Study Protocol
- (b) Consent Forms (English And Shona)
- (c) Survey Questionnaire(English And Shona)

- **APPROVAL NUMBER** :MRCZ/B/114
The above details should be used on all correspondences, consent forms and documents as appropriate.
- **MRCZ MEETING DATE** : N/A
- **APPROVAL DATE** : 27 October, 2010
- **EXPIRATION DATE** : 26 October, 2011
- **TYPE OF MEETING** : Expedited review

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the MRCZ Offices should be submitted one month before the expiration date for continuing review.
SERIOUS ADVERSE EVENT REPORTING: All serious problems having to do with subject safety must be reported to the Institutional Ethical Review Committee (IERC) as well as the MRCZ within 3 working days using standard forms obtainable from the MRCZ Offices.
MODIFICATIONS: Prior MRCZ and IERC approval using standard forms obtainable from the MRCZ Offices is required before implementing any changes in the Protocol (including changes in the consent documents).
TERMINATION OF STUDY: On termination of a study, a report has to be submitted to the MRCZ using standard forms obtainable from the MRCZ Offices.
QUESTIONS: Please contact the MRCZ on Telephone No. (04) 791792, 791193 or by e-mail on mrcz@mrczimshared.co.zw.

Yours Faithfully


.....
**MRCZ SECRETARIAT
FOR CHAIRPERSON
MEDICAL RESEARCH COUNCIL OF ZIMBABWE**



PROMOTING THE ETHICAL CONDUCT OF HEALTH RESEARCH
Registered with the USA Office for Human Research Protections (OHRP) as an International IRB
(IRB Number IRB00002409 IORG0001913)

Appendix D: Ethics Approval from the University of the Western Cape Senate Research Committee



Private Bag X17, Belville, 7535
South Africa
Tel: +27 (0) 21 959 2163
Fax: +27 (0) 21 959 2755
E-mail: csjohnson@uwc.ac.za

HIGHER DEGREES COMMITTEE

7 December 2009

TO WHOM IT MAY CONCERN

Dear Sir/Madam

Research Project of Mr Simukai Shamu (Student Number: 2931022)

This letter confirms that **Mr Shamu** is a registered student in the Faculty of Community and Health Sciences at the University of the Western Cape.

His research proposal entitled "The dynamics of intimate partner violence and the risk of HIV among pregnant women in Zimbabwe" submitted in fulfilment of the requirements for PhD in Public Health has been examined by the Higher Degrees Committee and found to be of high scientific value, methodologically sound and ethical.

Senate Higher Degrees and Senate Ethics Committees have approved the proposal.

We fully support the research.

Sincerely

DR GAVIN REAGON
Chairperson: Higher Degrees Committee



**UNIVERSITY of the
WESTERN CAPE**

A place of quality, a place to grow, from hope to action through knowledge

Appendix E: Permission to conduct the study at Harare City Health Clinics



CITY OF HARARE

Director of Health Services
DR STANLEY MUNGOFA
MD (Cuba) MPH (Zim)

All correspondence to be addressed to the
DIRECTOR OF HEALTH SERVICES

DIRECTOR OF HEALTH SERVICES
Rowan Martin Building,
Civic Centre,
Pennefather Avenue,
off Rotten Row,
Harare, Zimbabwe.
P. O. Box 596
Telephone: 753326
753330/1/2
Fax: (263-4) 752093

Ref:.....

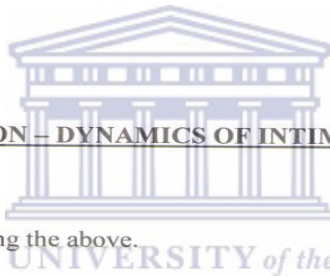
Your Ref:.....

22 March 2010

Mr S Shamu
University of Zimbabwe
Department of Community Medicine
HARARE

Dear Sir/Madam

RE: **DATA COLLECTION – DYNAMICS OF INTIMATE PARTNER VIOLENCE (IPV)**



I refer to your letter concerning the above.

Permission has been granted for you to carry out the Dynamics of Intimate Partner Violence (IPV) and the risk of HIV among pregnant women in City Health Clinics.

For further assistance liaise with the Sisters In Charge of the clinics.

Yours faithfully

DIRECTOR OF HEALTH SERVICES
PC/rm

ADHS(N)
c.c. Sisters In Charge - Clinics

Appendix F: Participant Information Sheet



UNIVERSITY OF THE WESTERN CAPE



School of Public Health

Private Bag X17 • **BELLVILLE** • 7535 • South Africa

Tel: +27 21- 959 2809, Fax: +27 21- 959 2872

Email: shamuts@yahoo.com

PARTICIPANT INFORMATION SHEET

Introducing the interviewer and the study

Hi, My name is I am a researcher working for the University of Zimbabwe's Department of Community Medicine and University of the Western Cape's School of Public Health in South Africa. We are doing research about women's health and life experiences. The study aims to find out the relationship between intimate partner violence and HIV risk among pregnant women attending antenatal and postnatal clinics in Harare in Warren Park, Mbare, Kambuzuma, Glen Norah, Glen View and Mufakose. The research is being conducted by Mr Simukai Shamu for his PhD studies in the School of Public Health at the University of the Western Cape. The information obtained in the study is hoped to assist pregnant women in Zimbabwe. At the end of the study the results will also be published in academic books/papers but this will not identify participants by their real names as the information will be grouped together and pseudonyms will be used.

Method

The study involves interviewing you for about 45 minutes. I will be asking you questions and recording your responses on the questionnaire. We also request you to allow our supervisor to access your medical card that contains your information on HIV testing and pregnancy outcome in the clinic. We assure you that this card will not be taken outside the clinic and your name and identity will be kept confidential. I will not know your HIV test results and will not ask you to tell me your HIV status.

How the study can affect you

The study contains some questions that you may find difficult to answer or remind you of some incidents of violence that you felt uncomfortable with in your relationship with your current or past partner. Some may have been done before you turned 15 years of age by any other person, known or unknown to you. You are free not to answer such questions. Your participation in this study is voluntary and you are free to exit the interview at any time. If you refuse to participate in the study it will not in any way negatively affect your access to health care in this or other clinics. However, many women have found such an opportunity to talk about these things helpful. We have arranged with some trained counsellors outside this clinic that you can approach should you need assistance during the duration of this study. They can listen to you, support you and help you to cope with the problem. We encourage you to contact them using the contact details below.

Keeping the information Confidential

If you agree to participate in the study, we will hold the interview in private and the information collected, including the medical information will be kept confidential. Your name will not be recorded on the questionnaire and your identity will be kept confidential. When we report on all information we will refer to all women in the study and not you as an individual.

Informed Consent/Assent

It is OK if you do not want to participate and you can remove your name from the study anytime and the researchers will respect your decision. If you agree to participate I will read out a formal consent form to you and ask you to sign it to say you agree to participate.

Compensation

I will give you some refreshments (e.g. a cool drink) during the interview.

Contact details

If you have any questions, you can contact Mr Simukai Shamu. His telephone number is 795835. If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research subject or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to

someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe on telephone 791792 or 791193.

CONTACT INFORMATION OF TRAINED COUNSELLORS IN HARARE:

1. Musasa:

Toll free: 0800 3268 727 Office telephone number: 04 706284 Telefax: 04 794 983

Physical Address: 64 Selous Ave, Cnr 7th Street, Harare, **Zimbabwe**. ,Postal address, P.O. Box A712, Avondale

2. Women and AIDS Support Network (WASN)

Tel: 04-791401/2/4, Physical Address: 13 Walterhill Avenue, Eastlea, Harare

3. Women in Law and Development in Africa (WILDAF)

Tel: 04-751189/752105/771958-9, Physical Address: 2nd Floor Zambia House Kwame Nkrumah Road, Harare;

Postal Address: Box 4622 Harare





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CONSENT FORM

Title of Research Project: Women's health study in Zimbabwe.

Principal Investigator: Mr Simukai Shamu

The information sheet has been read and explained to me in a language that I understand and I freely and voluntarily agree to participate. I have been given an opportunity to ask questions about the study and my questions have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study at any time and this will not negatively affect me in any way.

Participant's Name:..... **No.**.....

Signature of participant.....Date.....

Signature of Witness.....Date.....

Signature of Interviewer.....Date.....

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research subject or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe on telephone 791792 or 791193.



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Email: shamuts@yahoo.com

ASSENT FORM (15-17 years)

Title of Research Project: Women's health study in Zimbabwe.

Principal Investigator: Mr Simukai Shamu

The information sheet has been read and explained to me in a language that I understand and I freely and voluntarily agree that you can interview..... (Name of minor). I have been given an opportunity to ask questions about the study and my questions have been answered. I understand that her identity will not be disclosed and that she may withdraw from the study at any time and this will not negatively affect her in any way.

Name of Guardian.....Signature of Guardian..... Date.....

Signature of Witness.....Date.....

Signature of Interviewer.....Date.....

For children 15 years old to 17 years old

My participation in this research study is voluntary. I have read and understood the above information, asked any questions which I may have and have agreed to participate. I will be given a copy of this form to keep.

Name of Subject.....No.....

Signature of Subject.....Date.....

Signature of Witness.....Date.....

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research subject or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe on telephone 791792 or 791193.



INTIMATE PARTNER VIOLENCE AND HIV STUDY

FOCUS GROUP DISCUSSION GUIDE

Questions for pregnant mothers

1. What type of decisions should a wife/partner/girlfriend make in a relationship?
 - a. Do unmarried pregnant women consult with their fathers about decisions?
2. How do decisions about being pregnant happen?
 - a. What happens once a woman finds out she is pregnant?
 - b. Who does she inform?
 - c. What decisions are made? By who? **Keep the decision question later when they are more relaxed!!**
3. How are women treated by their partners during pregnancy?
 - a. How are they treated ...voluntarily? Mistreatments...
 - b. What type of unwanted actions or behaviour do men do to their partners during pregnancy? **Probe financially, emotionally, physically, sexually?** Probe.
4. How does abuse happen? Why does this happen?
 - a. Should a wife be punished or disciplined by her husband? Why? How? In what circumstances?
 - b. What sorts of 'discipline' do you think are acceptable?
 - c. What circumstances facilitate women's mistreatment (abuse) by their partners?
5. If you were to describe a man who abuses his partner, how will you describe this man?
 - a. Context of abuse
6. Are women forced to have sex with their partner/husband? Under what circumstances?
7. Who usually decides how, when and how often to have sex between partners?
8. Why do you think pregnant women are abused? Under what circumstances?
9. Do men force their partners to have sex even if they do not want? What about when a woman is pregnant?
10. Are women abused for testing for HIV? **(I am not asking you to report on what happened to you personally but pregnant women in general.)**
 - a. What do you think it was like?

- b. What made them decide to accept the test and to get the test result?
11. Where do women get help (report) if they are abused by their partners?

Questions for women attending post natal care

12. Do you think it is good for a woman to inform her partner about her HIV test results? Why do you say so? Probe.
13. Why do some women fail to collect their HIV test results?
- a. Fail to join PMTCT program?
 - b. What makes some women decide to accept the test?
14. What is the best time/opportunity to inform the male partner?
15. How would you inform him if you wanted to?
16. How do you think a husband/partner might react after you tell him your status (that you are HIV positive)
17. Who else do you think women inform about their HIV status?
18. What do you think happens to a woman who makes her status known to her partner?
Probe several actions and behaviours! What do you think happens when women tell other people about their status?
19. What could possibly happen to a woman after she disclosed her HIV test results to a husband/partner?
20. How involved are men in PMTCT programme? Are men supportive of women to test during pregnancy?

Intimate partner violence and HIV study

Semi structured interviews with health workers

Health Facility

1. Can you describe how ANC is organised at this health facility?
 - a. Booking process, booking per day? Per week? Per month?
 - b. Attendance - numbers? Socio-demographic characteristics, coverage
 - c. Opening hours-weekly, daily. When do you receive more clients?
2. Can you describe the process of VCT at this health facility?
 - a. Provider initiated or client initiated?
 - b. Counselling process, coverage and organisation
 - c. Testing, coverage? Type of test: ELISA, ABBOTT, DETERMINE, rapid testing? Who performs the test?
 - d. Opening hours-week, day...when do you receive more clients?
 - e. How many mothers deliver at this facility? Per day? Per week? Per month? Per year?
3. What proportion of women who attend ANC at this clinic deliver elsewhere (home or other facilities/hospitals)?
4. Can you please describe how postnatal care is organised?
 - a. Coverage
 - b. Peak days/times
 - c. Opening hours-weekly, daily,
5. What proportion of women who attend ANC at this facility attend postnatal care clinics at this facility? elsewhere?
6. How often are women accompanied by their husbands for ANC? VCT? PNC?
7. Are women readily available for testing HIV? Any influence/support from partners?
8. What proportions fail/refuse to test for HIV? What do you do if they refuse?
9. What proportions collect their results? After how long do they collect results? What make them fail to collect results?

10. Do you encourage women to disclose their HIV test results to their partners? Do they disclose? After how long? With what results? Do you think their partners know their results (do you think they know their partner's results?)

Violence

11. Do you formally screen for IPV? Why? How? What instrument do you use?

a. How often?

12. Do you think it is good to screen for violence?

13. What are the challenges for screening for abuse?

14. Were you trained to screen for abuse?

15. How often do you identify patients who are abused by their partners?

16. How do you recognise that they are abused?

17. What types of abuse do you detect?

18. What are the most common types of abuse that you identify? Do you record this information on their medical records?

19. Do women disclose, without being asked, the abuse they experienced?

20. What form of education would you need regarding violence against women?

21. How often do pregnant mothers present with signs of abuse?

22. What signs of abuse do they present? Do you refer cases of abuse elsewhere? Where? How often do you hear or handle cases of violence after a pregnant woman tested for HIV?

23. What types of abuse do you hear? How do you handle them? Do you detect them on your own or women report them to you?

Appendix K: Women's Health Study Questionnaire

**WOMEN'S HEALTH STUDY
(ZIMBABWE)**

QUESTIONNAIRE



**Department of Community Medicine, College of Health Sciences, University of Zimbabwe, Box
A178, Avondale, Harare Zimbabwe, Email: shamuts@yahoo.com, Tel/Fax: +263-4 795 835**

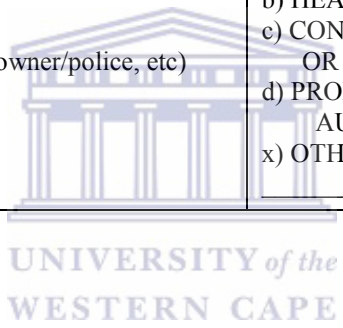
and

**School of Public Health, University of the Western Cape, Bag X17, Bellville, 7535, Cape Town,
South Africa. Email: sshamu@uwc.ac.za Tel: +27 21 959 2809 Fax: +27 21 959 2872**

| | | | |
|--|---|--|--|
| 105. | Are you <u>currently</u> married or do you have a male partner? IF RESPONDENT HAS A MALE PARTNER ASK Do you and your partner live together? | CURRENTLY MARRIED.....1 LIVING WITH MAN, NOT MARRIED.....2 <i>CURRENTLY HAVING A REGULAR PARTNER LIVING APART</i>3 NOT CURRENTLY MARRIED OR LIVING WITH A MAN.....4 | ⇒1 09 ⇒1 09 ⇒1 09 |
| 106 | Have you <u>ever</u> been married or lived with a male partner? | YES, MARRIED.....1 YES, LIVED WITH A MAN, BUT NEVER MARRIED.....2 NO.....3 | ⇒S .1a ⇒S .1a |
| 107 | Did the <u>last partnership with a man</u> end in divorce or separation, or did your husband/partner die? | DIVORCED 1 SEPARATED/BROKEN UP 2 WIDOWED/PARTNER DIED 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒1 09 |
| 108 | Was the divorce/separation initiated by you, by your husband/partner, or did you both decide that you should separate? | RESPONDENT 1 HUSBAND/PARTNER 2 BOTH (RESPONDENT AND PARTNER) 3 OTHER: 4 REFUSED/NO ANSWER 9 | |
| 109 | How many times in your life have you been married and/or lived together with a man? (INCLUDE CURRENT PARTNER IF LIVING TOGETHER) | NUMBER OF TIMES MARRIED/ LIVED TOGETHER [] [] IF "00" REFUSED/NO ANSWER99 | ⇒S .1a |
| The next few questions are about your <u>current</u> or <u>most recent</u> partnership | | | |
| 110 | . Do/did you live with your husband/partner's parents or any of his relatives? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 111 | IF CURRENTLY WITH PARTNER: Do you <u>currently</u> live with your parents or any of your relatives? IF NOT CURRENTLY WITH PARTNER: Were you living with your parents or relatives <u>during your last relationship</u> ? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 112 | Does/did your husband/partner have any other wives while being married (having a relationship) with you? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒1 15 ⇒1 15 |
| 113 | How many wives/partners does/did he have (including yourself)? | NUMBER OF WIVES [] [] REFUSED/NO ANSWER 9 | ⇒1 15 |

| | | | |
|------------------------------------|--|--|------------------------|
| 114 | Are/were you the first, second..... wife/partner? <i>ADAPT WORDING LOCALLY, CHECK THAT THIS REFERS TO THE OTHER WIVES HE HAD AT SAME TIME WHILE BEING WITH RESPONDENT</i> | NUMBER /POSITION [][] REFUSED/NO ANSWER99 | |
| 115 | Did you have any kind of marriage ceremony to formalize the union? What type of ceremony did you have? MARK ALL THAT APPLY | NONE.....A CIVIL MARRIAGE.....B RELIGIOUS MARRIAGEC CUSTOMARY MARRIAGED APOSTOLIC SECT MARRIAGE.....E OTHER: F | |
| 116 | | | |
| 117 | Did you yourself choose your <u>current/most recent</u> husband, did someone else choose him for you, or did he choose you? IF SHE DID NOT CHOOSE HERSELF, PROBE: Who chose your <u>current/most recent</u> husband/partner for you? | BOTH CHOSE 1 RESPONDENT CHOSE..... 2 RESPONDENT'S FAMILY CHOSE 3 PARTNER CHOSE 4 PARTNER'S FAMILY CHOSE..... 5 CHURCH.....6OT HER: 7 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒1 19 ⇒1 19 |
| 118 | Before the marriage with your <u>current /most recent</u> husband, were you asked whether you wanted to marry him or not? | YES 1 NO..... 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 119 | Did your marriage involve bride price payment? | YES/DOWRY 1 YES/BRIDE PRICE 2 NO 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒S .1a ⇒S .1a |
| 120 | Has all of the bride price been paid for, or does some part still remain to be paid? | ALL PAID..... 1 PARTIALLY PAID 2 NONE PAID 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 121 | Overall, do you think that the amount of dowry/bride price payment has had a positive impact on how you are treated by your husband and his family, a negative impact, or no particular impact? | POSITIVE IMPACT 1 NEGATIVE IMPACT 2 NO IMPACT 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 1a WOMAN'S ALCOHOL DRINKING | | | |

| | | | | | |
|-----|--|--|---|--|-------------------------------------|
| 122 | <p>Now I would like to ask you about drinking alcohol. How often did you drink alcohol in the 12 months before your most recent pregnancy? Would you say:</p> <ol style="list-style-type: none"> 1. Every day or nearly every day 2. Once or twice a week 3. 1 – 3 times a month 4. Occasionally, less than once a month 5. Never | <p>EVERY DAY OR NEARLY EVERY DAY..... 1 ONCE OR TWICE A WEEK..... 2 1 – 3 TIMES IN A MONTH 3 RARELY 4 NEVER 5 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9</p> | | | |
| 123 | <p>How many times did you drink alcohol during your most recent pregnancy? Would you say:</p> <ol style="list-style-type: none"> 1. Every day or nearly every day 2. Once or twice a week 3. 1 – 3 times a month 4. Occasionally, less than once a month <p>Never</p> | <p>EVERY DAY OR NEARLY EVERY DAY..... 1 ONCE OR TWICE A WEEK..... 2 1 – 3 TIMES IN A MONTH 3 RARELY 4 NEVER 5 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9</p> | | | <p>⇒ 12 5</p> |
| 124 | <p>In the <u>past 12 months</u>, have you ever experienced any of the following problems, related to your drinking?</p> <ol style="list-style-type: none"> a) money problems b) health problems c) conflict with family or friends d) problems with authorities (bar owner/police, etc) x) other, specify. | <p>a) MONEY PROBLEMS b) HEALTH PROBLEMS c) CONFLICT WITH FAMILY OR FRIENDS d) PROBLEMS WITH AUTHORITIES x) OTHER: _____</p> | <p>YES</p> <p>1 1 1 1 1</p> | <p>NO</p> <p>2 2 2 2 2</p> | |



| | | | | | |
|-----|---|--|--|---|--|
| 125 | <p>CESD-Depression scale</p> <p>The next questions are related to other common problems that may have bothered you in the <u>past 4 weeks</u>. If you had the problem in the past 4 weeks, answer yes. If you have not had the problem in the past 4 weeks, answer no.</p> <p>a) Do you often have headaches? b) Is your appetite poor? c) Do you sleep badly? d) Are you easily frightened?</p> <p>e) Do your hands shake? f) Do you feel nervous, tense or worried? g) Is your digestion poor? h) Do you have trouble thinking clearly?</p> <p>i) Do you feel unhappy? j) Do you cry more than usual? k) Do you find it difficult to enjoy your daily activities? l) Do you find it difficult to make decisions?</p> <p>m) Is your daily work suffering? n) Are you unable to play a useful part in life? o) Have you lost interest in things that you used to enjoy? p) Do you feel that you are a worthless person?</p> <p>q) Has the thought of ending your life been on your mind? r) Do you feel tired all the time? s) Do you have uncomfortable feelings in your stomach? t) Are you easily tired?</p> | <p>a) HEADACHES b) APPETITE c) SLEEP BADLY d) FRIGHTENED</p> <p>e) HANDS SHAKE f) NERVOUS g) DIGESTION h) THINKING</p> <p>i) UNHAPPY j) CRY MORE k) NOT ENJOY l) DECISIONS</p> <p>m) WORK SUFFERS n) USEFUL PART o) LOST INTEREST p) WORTHLESS</p> <p>q) ENDING LIFE r) FEEL TIRED s) STOMACH t) EASILY TIRED</p> | <p>YES</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> <p>1 1 1 1</p> | <p>NO</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> <p>2 2 2 2</p> | |
| 126 | <p>Just now we talked about problems that may have bothered you in the past 4 weeks. I would like to ask you now: In your life, have you <u>ever</u> thought about ending your life?</p> | <p>Yes No Don't know/don't remember Refused/no answer</p> | | | ⇒ S. 2 |
| 127 | <p>Have you <u>ever</u> tried to take your life?</p> | <p>YES1 NO2 DON'T KNOW/DON'TREMEMBER... 8 REFUSED/NO ANSWER9</p> | | | If ye s re fe r fo r co un se lli ng |

SECTION 2 REPRODUCTIVE HEALTH

Now I would like to ask about your past and current pregnancies

| | | | |
|-----|---|--|------|
| 201 | How many times have you been pregnant? Include pregnancies that did not end up in a live birth, and current pregnancy? | TOTAL NO. OF PREGNANCIES [][] | |
| 202 | Have you ever given birth to a live baby, but later died? This could be at any age. IF NO, PROBE: Any baby who cried or showed signs of life but survived for only a few hours or days? | YES 1 NO 2 KNOW/DON'TREMEMBER.....8 REFUSED/NO ANSWER9 | |
| 203 | Have you ever had a pregnancy that miscarried, or ended in a stillbirth? PROBE: How many times did you miscarry, how many times did you have a stillbirth, and how many times did you give birth to a premature? | a) MISCARRIAGES [][] b) STILLBIRTHS [][] c) PREMATURE [][] IF NONE ENTER '00' | |
| 204 | Has/did your <u>current/most recent</u> husband/partner ever refused to use a method or tried to stop you from using a method to avoid getting pregnant? | YES..... 1 NO 2 REFUSED.....9 | ⇒206 |
| 205 | In what ways did he let you know that he disapproved of using methods to avoid getting pregnant? MARK ALL THAT APPLY | TOLD ME HE DID NOT APPROVE A SHOUTED/GOT ANGRY B THREATENED TO BEAT ME C THREATENED TO LEAVE/THROW ME OUT OF HOME D BEAT ME/PHYSICALLY ASSAULTED E TOOK OR DESTROYED METHOD F SEXUALLY ASSAULTED ME.....G OTHER X | |
| 206 | Have you ever used a condom with your <u>current/most recent</u> partner? | YES..... 1 NO 2 REFUSED.....9 | ⇒210 |
| 207 | Have you ever asked your <u>current/most recent</u> partner to use a condom? | YES..... 1 NO 2 Don't know/Don't remember.....8 REFUSED.....9 | ⇒210 |
| 208 | Has your <u>current/most recent</u> husband/partner ever refused to use a condom? | YES..... 1 NO 2 Don't know/Don't remember.....8 REFUSED.....9 | ⇒210 |
| 209 | In what ways did he let you know that he disapproved of using a condom? MARK ALL THAT APPLY | TOLD ME HE DID NOT APPROVE A SHOUTED/GOT ANGRY B THREATENED TO BEAT ME C THREATENED TO LEAVE/THROW ME OUT OF HOME D BEAT ME/PHYSICALLY ASSAULTED E TOOK OR DESTROYED METHOD F ACCUSED ME OF BEING UNFAITHFUL/ NOT A GOOD WOMAN..... G LAUGHED AT/NOT TAKE ME SERIOUS .. H SAID IT IS NOT NECESSARY I OTHER X | |

| | | | |
|-----|---|---|------|
| 210 | Have you <u>ever</u> used anything, or tried in any way, to delay or avoid getting pregnant? | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 99 | |
| 211 | Are you <u>currently</u> doing something, or using any method, to delay or avoid getting pregnant? | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | ⇒213 |
| 212 | What (main) method are you <u>currently</u> using? IF MORE THAN ONE, ONLY MARK MAIN METHOD | PILL/TABLETS 01 INJECTABLES 02 IMPLANTS (NORPLANT) 03 IUD 04 DIAPHRAGM/FOAM/JELLY 05 CALENDAR/MUCUS METHOD 06 FEMALE STERILIZATION..... 07 CONDOMS 08 MALE STERILIZATION 09 WITHDRAWAL 10 HERBS 11 OTHER: 96 DON'T KNOW/DON'T REMEMBER..... 98 REFUSED/NO ANSWER..... 99 | |
| 213 | Has husband/ partner ever refused responsibility for your most recent pregnancy or to father the child? | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | ⇒S.3 |
| 214 | How did he communicate this to you? | Shouted at me, insulted me.....A Beat or kicked meB Threw something at me.....C Refused to have sex with me.....D Threatened to end love/partnership.....E Ended love/partnership.....F Left home.....G Refused to live with me.....H talked to meI Others I | |

SECTION 3: MOST RECENT PREGNANCY

| | | | |
|-----|--|---|--|
| 301 | I would like to ask you about your <u>most recent pregnancy</u> At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, did you want no (more) children, or did you not mind either way? | BECOME PREGNANT THEN WAIT UNTIL LATER..... NOT WANT CHILDREN..... NOT MIND EITHER WAY REFUSED/NO ANSWER | |
| 302 | I would like to ask you about your <u>most recent pregnancy</u> At the time you became pregnant, did your husband/partner want you to become pregnant then, did he want to wait until later, did he want no (more) children at all, or did he not mind either way? | BECOME PREGNANT THEN WAIT UNTIL LATER..... NOT WANT CHILDREN..... NOT MIND EITHER WAY REFUSED/NO ANSWER | |

| | | | |
|-----|--|--|--|
| 303 | I would like to ask you about your <u>past pregnancies</u> . At ANY time you became pregnant before this pregnancy, did you want to become pregnant then, did you want to wait until later, did you want no (more) children, or did you not mind either way? | BECOME PREGNANT THEN WAIT UNTIL LATER..... NOT WANT CHILDREN..... NOT MIND EITHER WAY N/A.....5 DON'T KNOW/DON'T REMEMBER REFUSED/NO ANSWER | |
| 304 | How old were you when you first became pregnant even if it did not lead into a live birth? | AGE [] [] YEARS | |
| 305 | Who made the decision about having your most recent pregnancy? | MYSELF.....1 PARTNER.....2 PARTNER AND MYSELF.....3 JUST HAPPENED.....4 OTHERS5 | |
| 306 | | | |
| 307 | Do you have an intention to have another pregnancy? | YES NO REFUSED/NO ANSWER | |
| 308 | Does your partner have an intention of having another pregnancy with you? | YES NO DON'T KNOW/DON'T REMEMBER REFUSED/NO ANSWER | |
| 309 | How many months pregnant were you at the time you register at the maternity (ANC) clinic? | [.....] NEVER.....2 NO ANSWER.....3 DONT KNOW.....4 | |
| 310 | How many times did you visit the maternity clinic during your most recent pregnant | [.....] | |
| 311 | Did/ your husband/partner ever try to stop you or encourage you or have no interest in whether you received antenatal care for your pregnancy? | STOP ENCOURAGE NO INTEREST.....3 | |
| 312 | Did the father of this child buy 'preparation' for your baby? If so was it adequate and in time? | Yes..... 1 No..... 2 No answer.....9 | |

| | | | |
|-----|--|---|--|
| 313 | Would you say he bought or gave you some money to buy 'preparation' late or in time? | Early 1 Late..... 2 Good time.....3 No answer.....9 | |
| 314 | Would you say the clothing/preparation adequate or inadequate? | Adequate..... 1 Inadequate..... .2 No answer.....9 | |
| 315 | Did your husband/partner have preference for a son, daughter or did it not matter whether it is a boy or a girl? | SON..... .1 DAUGHTER..... ..2 DOES NOT MATTER.....3 | |
| 316 | During your recent pregnancy, did you smoke any cigarettes or use tobacco? | YES NO DON'T KNOW/DON'T REMEMBER REFUSED/NO ANSWER | |
| 317 | How much did your baby weigh at birth? RECORD FROM HEALTH CARD WHERE POSSIBLE | KG FROM CARD [] KG FROM RECALL [] DON'T KNOW/DON'T REMEMBER REFUSED/NO ANSWER | |
| 318 | May I please have a look at your clinic card? Remember, as i said before kept confidentially. Apgar scale: Read the apgar scale, head circumference, mother's and child's HIV test from the card | Apgar scale Head circumference Mother's HIV test Positive = 1 Negative =1 Baby's HIV test Positive = 1 Negative =1 | |
| 319 | Did your most recent pregnancy ended in you having the following? | Yes No Premature baby.....1 2 Still birth.....1 2 c-section.....1 2 | |
| 320 | How many days did you stay in the hospital/clinic when you delivered this baby? | [] days Did not give birth in clinic/hospital.....1 | |

SECTION 4 OTHER EXPERIENCES

| | | | |
|------|--|--------------|--|
| | In their lives, many women experience different forms of violence from relatives, other people that they know, and/or from strangers. If you don't mind, I would like to briefly ask you about some of these situations. Everything that you say will be kept private. May I continue? | | |
| 401a | Before the age of 15 years, has anyone ever excessively beaten or physically mistreated you | NO ONE.....A | ⇒ 402 |
| | | | b) ASK ONLY FOR THOSE MARKED. How many times did this happen? Once or twice, a few times, or many times |

| | | | |
|-----|--|--|------------------------------|
| | | Boyfriend.....2 Teacher.....3 Father/family member.....4 Man from school/area.....5 Friend of the family.....6 Relative.....7 stranger/unknown person.....8 Others..... 9 | |
| 407 | How old was he when you had sexual intercourse with him? Would you say he was..... | [][] Younger than me.....1 Same age with me.....2 1-2 years older than me.....3 3-5 years older than me.....4 5-10 years older than me.....5 More than 10 years older than me.....6 REFUSED/NO ANSWER.....9 | |
| 408 | The number of sexual partners women have had differs a lot from person to person. Some women report having had one sex partner, some 2 or more, and still others report many, even 50 or more. <u>In your life</u> how many different men have you had sex with? IF NEEDED PROBE: More or less; I do not need to know the exact number. <i>I</i> | PARTNERS [][][] DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99 | |
| 409 | When you were a child, was your mother hit by your father (or her husband or boyfriend)? | YES 1 NO.....2 ⇒411 PARENTS DID NOT LIVE TOGETHER.....3 ⇒411 DON'T KNOW..... 8 REFUSED/NO ANSWER 9 | |
| 410 | As a child, did you see or hear this violence? | YES NO..... DON'T KNOW..... REFUSED/NO ANSWER | |
| 411 | As far as you know, was your (most recent) partner's mother hit or beaten by her husband? | YES NO PARENTS DID NOT LIVE TOGETHER DON'T KNOW REFUSED/NO ANSWER | ⇒S .5⇒ S.5 ⇒S .5 |
| 412 | Did your (most recent) husband/partner see or hear this violence? | YES NO..... DON'T KNOW..... REFUSED/NO ANSWER REFUSED/NO ANSWER | |

SECTION 5 CURRENT OR MOST RECENT PARTNER CHARACTERISTICS

I would now like you to tell me a little about your current/most recent husband/partner.

| | | | |
|-----|--|---|----------------------|
| 501 | How old was your husband/partner on his last birthday? PROBE: MORE OR LESS IF MOST RECENT PARTNER DIED: How old would he be now if he were alive? | AGE (YEARS)[][] | |
| 502 | In what year was he born? | YEAR.....[][][] DON'T KNOW/DON'T REMEMBER 98 REFUSED/NO ANSWER 99 | |
| 503 | Did he ever attend formal school? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒505 |
| 504 | What is the highest level of education that he achieved? MARK HIGHEST LEVEL. | PRIMARY 1 SECONDARY 2 HIGHER 3 DON'T KNOW 8 REFUSED/NO ANSWER 9 | |
| 505 | IF CURRENTLY WITH PARTNER: Is he currently working, looking for work or unemployed, retired or studying? IF NOT CURRENTLY WITH PARTNER: Towards the end of your relationship was he working, looking for work or unemployed, retired or studying? | WORKING 1 LOOKING FOR WORK/UNEMPLOYED ... 2 RETIRED 3 STUDENT 4 DISABLED/LONG TERM SICK..... 5 DON'T KNOW/DON'T REMEMBER 98 | ⇒508 ⇒508 |
| 506 | What kind of work does/did he normally do? SPECIFY KIND OF WORK | PROFESSIONAL:..... 1 SEMI-SKILLED:..... 2 UNSKILLED/MANUAL: 3 MILITARY/POLICE:..... 4 OTHER:96 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 507 | | | |
| 508 | As far as you know was your current/most recent husband/partner beaten regularly by someone in his family | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9 | |
| 509 | Does/did your husband/partner drink alcohol? | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9 | ⇒515 |
| 510 | How often does/did your husband/partner drink alcohol? 1. Every day or nearly every day 2. Once or twice a week 3. 1-3 times a month 4. Occasionally, less than once a month 5. Never | EVERY DAY OR NEARLY EVERY DAY .. 1 ONCE OR TWICE A WEEK 2 1-3 TIMES IN A MONTH 3 LESS THAN ONCE A MONTH 4 NEVER 5 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | ⇒514 ⇒514 ⇒514 |

| 511 | In the <u>past 12 months</u> (<u>In the last 12 months of your last relationship</u>), how often have you seen (did you see) your husband/partner drunk? Would you say most days, weekly, once a month, less than once a month, or never? | MOST DAYS..... 1 WEEKLY..... 2 ONCE A MONTH..... 3 LESS THAN ONCE A MONTH..... 4 NEVER 5 DON'T KNOW/DON'T REMEMBER..... 98 REFUSED/NO ANSWER..... 99 | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|--|------|-----|----|-------------------|---|---|----------------------|---|---|--------------------|---|---|------------------------------------|---|---|-----------------|---|---|--|
| 512 | Since the time you became pregnant how often have you seen (did you see) your husband/partner drunk? Would you say most days, weekly, once a month, less than once a month, or never? | MOST DAYS 1 WEEKLY 2 ONCE A MONTH 3 LESS THAN ONCE A MONTH..... 4 NEVER 5 DON'T KNOW/DON'T REMEMBER..... 98 REFUSED/NO ANSWER..... 99 | ⇒514 | | | | | | | | | | | | | | | | | | |
| 513 | In the <u>past 12 months</u> (<u>In the last 12 months of your relationship</u>), have you experienced any of the following problems, related to your husband/partner's drinking? a) money problems b) domestic problems c) health problems d) conflict with family or friends x) Any other problems, specify. | <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) MONEY PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) DOMESTIC PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) HEALTH PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) CONFLICT WITH FAMILY OR FRIENDS</td> <td>1</td> <td>2</td> </tr> <tr> <td>x) OTHER: _____</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | a) MONEY PROBLEMS | 1 | 2 | b) DOMESTIC PROBLEMS | 1 | 2 | c) HEALTH PROBLEMS | 1 | 2 | d) CONFLICT WITH FAMILY OR FRIENDS | 1 | 2 | x) OTHER: _____ | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| a) MONEY PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| b) DOMESTIC PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| c) HEALTH PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| d) CONFLICT WITH FAMILY OR FRIENDS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| x) OTHER: _____ | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 514 | Since the time you became pregnant have you experienced any of the following problems, related to your husband/partner's drinking? a) money problems b) domestic problems c) health problems d) conflict with family or friends x) Any other problems, specify. | <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) MONEY PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) DOMESTIC PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) HEALTH PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) CONFLICT WITH FAMILY OR FRIENDS</td> <td>1</td> <td>2</td> </tr> <tr> <td>x) OTHER: _____</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | a) MONEY PROBLEMS | 1 | 2 | b) DOMESTIC PROBLEMS | 1 | 2 | c) HEALTH PROBLEMS | 1 | 2 | d) CONFLICT WITH FAMILY OR FRIENDS | 1 | 2 | x) OTHER: _____ | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| a) MONEY PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| b) DOMESTIC PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| c) HEALTH PROBLEMS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| d) CONFLICT WITH FAMILY OR FRIENDS | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| x) OTHER: _____ | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 515 | Does/did your husband/partner ever use drugs? 1. Would you say: 1. Every day or nearly every day 2. Once or twice a week 3. 1 – 3 times a month 4. Occasionally, less than once a month 5. Never | EVERY DAY OR NEARLY EVERY DAY .. 1 ONCE OR TWICE A WEEK 2 1 – 3 TIMES IN A MONTH..... 3 LESS THAN ONCE A MONTH..... 4 NEVER 5 IN THE PAST, NOT NOW 6 DON'T KNOW /DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | | | | | | | | | | | | | | | | | | | |
| 516 | <u>Since you have known him</u> , has he ever been involved in a physical fight with another man? | YES 1 NO 2 DON'T KNOW /DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | | | | | | | | | | | | | | | | | | | |

SECTION 5a ATTITUDES TOWARDS PARTNER BEATING

In this community and elsewhere, people have different ideas about families and what is acceptable behaviour for men and women in the home. I am going to read to you a list of statements, and I would like you to tell me whether you generally agree or disagree with the statement. There are no right or wrong answers.

| | | | | | |
|-----|--|--|-----------------------------------|----------------------------------|----------------------------------|
| 517 | In your opinion, does a man have a good reason to hit/beat his wife if: a) She does not complete her household work to his satisfaction b) She disobeys him c) She refuses to have sexual relations with him d) She asks him whether he has other girlfriends e) He suspects that she is unfaithful f) He finds out that she has been unfaithful | a) HOUSEHOLD b) DISOBEYS c) NO SEX d) GIRLFRIENDS e) SUSPECTS f) UNFAITHFUL | YES 1 1 1 1 1 1 | NO 2 2 2 2 2 2 | DK 8 8 8 8 8 8 |
| 518 | In your opinion, can a married woman refuse to have sex with her husband if: a) She doesn't want to b) He is drunk c) She is sick d) He mistreats her e) She suspects he has extra-marital sexual relations with another woman f) She suspects her husband has an STI/HIV | a) NOT WANT b) DRUNK c) SICK d) MISTREAT e) SUSPECTS EXTRA MARITAL SEX f) SUSPECTS/KNOW STI | YES 1 1 1 1 1 1 | NO 2 2 2 2 2 2 | DK 8 8 8 8 8 8 |

SECTION 6 RESPONDENT AND HER PARTNER

| | | | | | | |
|-----|---|--|--|---------------------------------|----------------------------|------------------------|
| | When two people marry or live together, they usually share both good and bad moments. I would now like to ask you some questions about your current and past relationships and how your husband/partner treats (treated) you. I would again like to assure you that your answers will be kept secret, and that you do not have to answer any questions that you do not want to. | | | | | |
| 601 | In general, do (did) you and your (current or most recent) husband/partner discuss the following topics together: a) Things that have happened to him in the day b) Things that happen to you during the day c) Your worries or feelings d) His worries or feelings | a) HIS DAY b) YOUR DAY c) YOUR WORRIES d) HIS WORRIES | | Y E S 1 1 1 1 | N O 2 2 2 2 | DK 8 8 8 8 |
| 602 | In general, do (did) you and your (current or most recent) husband/partner discuss together how you should have sex, when, how often? | RARELY 1 SOMETIMES..... 2 OFTEN..... 3 DON'T DISCUSS..... 89 REFUSED/NO ANSWER..... 99 | | | | |
| 603 | In your relationship with your (current or most recent) husband/partner, how often would you say that you quarrelled? Would you say rarely, sometimes or often? | RARELY 1 SOMETIMES..... 2 OFTEN..... 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | | | | |
| 604 | In your opinion do you think it is a woman's responsibility, man's responsibility or both's responsibility to avoid getting pregnant? | Woman..... 1 Man..... 2 Both 3 | | | | |

| | | | | | | |
|-----|---|---|---|---|--|---|
| 605 | <p>DECISION MAKING SUBSCALE</p> <p>I am now going to ask you about some situations that are true for many women. Thinking about your (<u>current or most recent</u>) husband/partner, would you say it is generally true that he:</p> <p>a) Tries to keep you from seeing your friends b) Tries to restrict contact with your family of birth c) Insists on knowing where you are at all times. d) Gets angry if you speak with another man e) Is often suspicious that you are unfaithful f) Expects you to ask his permission before seeking health care for yourself</p> | <p>a) SEEING FRIENDS b) CONTACT FAMILY c) WANTS TO KNOW d) GETS ANGRY e) SUSPICIOUS f) HEALTH CENTRE</p> | <p>YES 1 1 1 1 1 1</p> | <p>NO 2 2 2 2 2 2</p> <p>DK 8 8 8 8 8 8</p> | | |
| 606 | <p>The next questions are about things that happen to many women, and that your current (or most recent) partner, or any other partner may have done to you</p> <p>EMOTIONAL VIOLENCE</p> <p>Has your <u>current</u> (or most recent) husband/partner or <u>any other partner</u> ever....</p> | <p>A) (If YES continue with B. If NO skip to next item) YES NO</p> | <p>B) Has this happened during the 12 months before recent pregnancy? YES NO</p> | <p>C) Has this happened during the most recent pregnancy? YES NO</p> | <p>D) Has this happened after you disclosed your HIV test result to your partner during most recent pregnancy? YES NO</p> | <p>E) During most recent pregnancy would you say that this has happened once, twice or thrice/more? 1 2 3+</p> |
| | <p>a) Insulted you or made you feel bad about yourself? b) Belittled or humiliated you in front of other people? c) Done things to scare or intimidate you on purpose (e.g. by the way he looked at you, by yelling and smashing things)? d) Threatened to hurt you or someone you care about?</p> | <p>1 2 1 2 1 2 1 2</p> | <p>1 2 1 2 1 2 1 2</p> | <p>1 2 1 2 1 2 1 2</p> | <p>1 2 1 2 1 2 1 2</p> | <p>1 2 3 1 2 3 1 2 3 1 2 3</p> |

| | | | | | | |
|-----|--|--|---|--|---|---|
| 607 | <p>PHYSICAL VIOLENCE</p> <p>Has your <u>current</u> (or most recent) husband/partner, or <u>any other partner</u> ever....</p> <p>a) Slapped you or thrown something at you that could hurt you? b) Pushed you or shoved you or pulled your hair? c) Hit you with his fist or with something else that could hurt you? d) Kicked you, dragged you or beaten you up? e) Choked or burnt you on purpose? f) Threatened to use or actually used a gun, knife or other weapon against you?</p> | <p>A) (If YES continue with B. If NO skip to next item)</p> <p>YES NO</p> <p>1 2 1 2 1 2 1 2 1 2 1 2 1 2</p> | <p>B) Has this happened <u>during the 12 months before recent pregnancy?</u></p> <p>YES NO</p> <p>1 2 1 2 1 2 1 2 1 2 1 2 1 2</p> | <p>C) Has this happened during the most recent pregnancy?</p> <p>YES NO</p> <p>1 2 1 2 1 2 1 2 1 2 1 2 1 2</p> | <p>D) Has this happened after you disclosed your HIV test result to your partner during most recent pregnancy?</p> <p>YES NO</p> <p>1 2 1 2 1 2 1 2 1 2 1 2 1 2</p> | <p>E) <u>During most recent pregnancy</u> would you say that this has happened once, twice or thrice/more?</p> <p>1 2 3+</p> <p>1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3</p> |
| 608 | <p>SEXUAL VIOLENCE</p> | <p>A) (If YES continue with B. If NO skip to next item)</p> <p>YES NO</p> | <p>B) Has this happened <u>during the 12 months before recent pregnancy?</u></p> <p>YES NO</p> | <p>C) Has this happened during the most recent pregnancy?</p> <p>YES NO</p> | <p>D) Has this happened after you disclosed your HIV test result to your partner during most recent pregnancy?</p> <p>YES NO</p> | <p>E) <u>During most recent pregnancy</u> would you say that this has happened once, twice or thrice/more?</p> <p>1 2 3+</p> |

| | | | | | | |
|-----|---|---|--|---|--|--|
| | a) Did your husband/partner ever physically force you to have sexual intercourse when you did not want to? | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |
| | b) Did you ever have sexual intercourse you did not want to because you were afraid of what your husband/partner might do? | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |
| | c) Did your husband/partner ever force you to do something sexual that you found degrading or humiliating? | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |
| 609 | ECONOMIC VIOLENCE Has your husband or partner (current or previous) ever... | A) (If YES continue with B. If NO skip to next item) YES NO | B) Has this happened <u>during the 12 months before recent pregnancy?</u> YES NO | C) Has this happened during the most recent pregnancy? YES NO | D) Has this happened after you disclosed your HIV test result to your partner during most recent pregnancy? YES NO | E) <u>During most recent pregnancy</u> would you say that this has happened once, twice or thrice/more? 1 2 3+ |
| | a) prohibited you from getting a job, going to work, trading, earning money or participating in income generating projects? | 1 2 | 1 2 | 1 2 | 2 2 | 1 2 3 |
| | b) taken your earnings from you if you have had any income?, | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |
| | c) forced you or your children to leave the house where you were living? | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |
| | d) not provided money to run the house or look after the children, but has money for other things? | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 |

VIOLENCE IN PREVIOUS PREGNANCIES

| | | | |
|-----|---|---|----------|
| 610 | You said that you have been pregnant ... times. Was there ever a time when you were slapped, hit or beaten by (<u>any</u> of) your partner(s) while you were pregnant? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9 | ⇒6 14 |
| 611 | Were you ever punched or kicked in the abdomen while you were pregnant? Did this happen in the <u>last</u> pregnancy? IF RESPONDENT WAS PREGNANT ONLY ONCE, CIRCLE CODE '1'. | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER 9 | |
| 612 | During the <u>most recent pregnancy in which you were beaten</u> , was the person who has slapped, hit or beaten you the father of the child? | YES 1 NO 2 DON'T KNOW /DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9 | |
| 613 | Compared to before you were pregnant, did the slapping/beating (REFER TO RESPONDENT'S PREVIOUS ANSWERS) get less, stay about the same, or get worse while you were pregnant? By worse I mean, more frequent or more severe. | GOT LESS 1 STAYED ABOUT THE SAME..... 2 GOT WORSE..... 3 DON'T KNOW/DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9 | |
| 614 | Has anyone ever forced you to have sex or to perform a sexual act or ever touched you sexually when you did not want to at the time you were pregnant but not during the most recent pregnancy? | YES 1 NO 2 DON'T KNOW /DON'T REMEMBER 8 REFUSED/NO ANSWER..... 9 | |

SECTION 7 INJURIES

| | | | |
|-----|--|---|-----------------------|
| | I would now like to learn more about the injuries that you experienced from (<u>any</u> of) your partner's acts that we have talked about (MAY NEED TO REFER TO SPECIFIC ACTS RESPONDENT MENTIONED IN SECTION 6). By injury, I mean any form of physical harm, including cuts, sprains, burns, broken bones or broken teeth, or other things like this. | | |
| 701 | Have you <u>ever</u> been injured as a result of these acts by (any of) your husband/partner(s). Please think of the acts that we talked about before. | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | ⇒703 ⇒703 |
| 702 | Has this happened during the most recent pregnancy? | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | |
| 703 | <u>In your life</u> did you <u>ever</u> lose consciousness because of what (any of your) your husband/partner(s) did to you? | YES 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | ⇒705 ⇒705 |
| 704 | Has this happened during your most recent pregnancy? | YES..... 1 NO 2 DON'T KNOW/DON'T REMEMBER..... 8 REFUSED/NO ANSWER..... 9 | |
| 705 | In your life, were you <u>ever</u> hurt badly enough by (any of) your husband/partner(s) that you needed health care (even if you did not receive it)? IF YES: How many times? IF NOT SURE: More or less? | TIMES NEEDED HEALTH CARE [] [] DON'T KNOW/DON'T REMEMBER..... 99 | If 00 go to S.8 |

| | | | |
|-----|--|--|--|
| 706 | Has this happened during the last 12 months? | YES.....1 NO2 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9 | |
|-----|--|--|--|

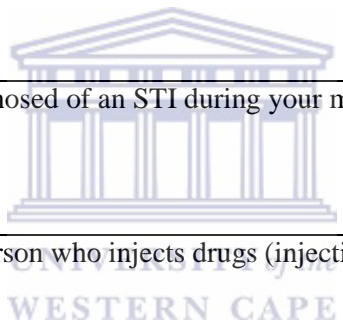
| | | | |
|-----|--|--|--|
| 707 | Who did you tell about this behaviour of your partner? MARK ALL MENTIONED PROBE: Who else? | NO ONE A FRIENDS.....B PARENTS.....C BROTHER OR SISTER.....D UNCLE OR AUNTE HUSBAND/PARTNER'S FAMILYF CHILDRENG NEIGHBOURS.....H POLICEI DOCTOR/HEALTH WORKER.....J PRIESTK COUNSELLOR.....L NGO/WOMEN'S ORGANIZATIONM LOCAL LEADERN LAW ORGANISATION.....O OTHER (specify):X | |
|-----|--|--|--|

| | | | |
|-----|---|--|--|
| 708 | Did anyone try to help you? Who tried to help you? MARK ALL MENTIONED PROBE: Who else? | NO ONE A FRIENDS.....B PARENTS.....C BROTHER OR SISTER.....D UNCLE OR AUNTE HUSBAND/PARTNER'S FAMILYF CHILDRENG NEIGHBOURS.....H POLICEI DOCTOR/HEALTH WORKER.....J PRIESTK COUNSELLOR.....L NGO/WOMEN'S ORGANIZATIONM LOCAL LEADERN LAW ORGANISATION.....O OTHER (specify):X | |
|-----|---|--|--|

SECTION 8: TRANSACTIONAL SEX/SEXUAL RISK BEHAVIOURS

| | | |
|---|-------------|--------------|
| A lot of people have found that they needed to start or continue having sex with someone whilst they receive certain items such as food, a place to stay (shelter), money, gifts, clothes, etc. I will say out some statements so that you confirm if you once did that or not. | True | False |
|---|-------------|--------------|

| | | | |
|-----|--|---|---|
| 801 | I have stayed with a main partner longer than I wanted to because I was worried about how to pay for things I couldn't afford by myself, having a place to live or paying for food, or other bills, my ability to support my children or someone else who depends on me for financial support, OR maintaining the social status or lifestyle that my partner provided for me | 1 | 2 |
| 802 | I have had a relationship with a casual partner in part because I hoped he would help me pay for things I couldn't afford by myself, having a place to live or paying for food, or other bills, my ability to support my children or someone else who depends on me for financial support, OR maintaining the social status or lifestyle that my partner provided for me | 1 | 2 |
| 803 | I have had sex with a once-off partner because I needed help paying for things I couldn't afford by myself, having a place to live or paying for food, or other bills, my ability to support my children or someone else who depends on me for financial support, OR maintaining the social status or lifestyle that my partner provided for me | 1 | 2 |
| 804 | Has any partner performed anal sex on you? | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER...8 REFUSED/NO ANSWER.....9 | |
| 805 | Have you ever been treated/diagnosed of an STI during your most recent pregnancy? | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER...8 REFUSED/NO ANSWER.....9 | |
| 806 | Have you ever had sex with a person who injects drugs (injection drug user)? | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER...8 REFUSED/NO ANSWER.....9 | |
| 807 | Have you ever had sex with a partner who was once diagnosed of an STD/STI? | YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER...8 REFUSED/NO ANSWER.....9 | |



| |
|--|
| <p>SECTION 8a: HIV TESTING</p> <p>I would like to ask you about your relations with your partner after you tested for HIV during the current pregnancy. Remember I said I will not ask you about your HIV status in this interview and I do not need to know your status at all.</p> |
|--|

| | | |
|-----|---|--|
| | Health care workers encourage people who test for HIV to disclose their test results to their partners and other people close to them. I would like to ask you about HIV test disclosure. Instruction: You are not required to disclose your HIV test results in this interview and I will not ask you to tell me | |
| 808 | Did you test for HIV during pregnancy? | Yes.....1 No.....2 REFUSED/NO ANSWER.....9 |

Skip

| | | | |
|-----|---|---|---|
| | | | 810 |
| 809 | Did you know your results before testing during pregnancy? | YES.....1 NO.....2 REFUSED/NO ANSWER.....9 | |
| 810 | Did you tell your husband or partner about your HIV test result? | YES.....1 NO.....2 | ⇒8 13 |
| 811 | Are you planning to tell your husband/partner about your HIV test result? | YES.....1 NO.....2 REFUSED/NO ANSWER.....9 | ⇒8 15 |
| 812 | When do you think you will tell him? | Within 3 days.....1 Within a week.....2 Within a month.....3 Within three months.....4 Within six months.....5 No, i will not tell him.....6 I do not know.....7 | ⇒81 5 ⇒81 5 ⇒81 5 ⇒81 5 ⇒81 5 |
| 813 | How long did it take you to disclose your HIV test results to your husband/partner? | Within three days.....1 Within a week.....2 Within a month.....3 Within three months.....4 Within six months.....5 Over six months.....6 | |
| 814 | What was his reaction after telling him or after he knew your HIV status? | Helped me.....A Shouted at me.....B Supported me.....C Violence.....D Emotional violence.....E Thought about his HIV status.....F Asked about my sexual history.....G consulted the doctor/nurse.....H Threatened to beat me.....I Threatened rejecting me.....J Rejected me.....K Withdrew sexual intercourse.....L Took other sexual partners.....M I don't know.....n Was happy.....O Others.....X | ⇒9 22 |
| 815 | Why did you not tell him your HIV test result? | I do not know much about HIV.....A He might leave me.....B He might be afraid of catching HIV from me.....C He might get angry with me.....D He might think I am a bad person.....E He might tell others.....F He has many problems to deal with at the moment...G There is no need to tell him until I am sick.....H I do not worry about that.....I I might be forced to leave his house/him.....J He might hurt me physically.....K Other.....L | ⇒82 0 ⇒82 0⇒8 20⇒ 820 ⇒82 0⇒8 20⇒ 820 ⇒82 0⇒8 20⇒ 820 ⇒82 |

| | | | |
|-----|---|--|----------|
| | | | 0 |
| 816 | Do you think your relationship with your partner changed for the better or for the worse or did not change after telling him your HIV status? | Better.....1 Worse.....2 Nothing changed.....3 | |
| 817 | Did you tell any other person about your HIV status? | YES.....1 NO.....2 Refused/No answer.....9 | ⇒8 20 |
| 818 | Who did you tell? Probe: Who else? TICK ALL THAT APPLY | Friend.....A Relative.....B Neighbour.....C Parent(s).....D Organisation.....E Counsellor.....F Pastor.....G Health worker.....H Others....specify.....I | |
| 819 | What type of support did you receive from him/her? | Counselling.....1 Money.....2 Information.....3 Medicines/drugs.....4 Others.....5 Nothing.....6 | |
| 820 | Does your partner know his HIV status? | YES.....1 NO.....2 DON'T KNOW3 REFUSED/NO ANSWER.....9 | ⇒8 22 |
| 821 | In your opinion is he willing to get tested? | YES.....1 NO.....2 Don't know.....3 REFUSED/NO ANSWER.....9 | |
| 822 | Have you asked him to get tested? | YES.....1 NO.....2 REFUSED/NO ANSWER.....9 | |

SECTION 9 COMPLETION OF INTERVIEW

| | | | |
|-----|---|--|--|
| 901 | We have now finished the interview. Do you have any comments, or is there anything else you would like to add? _____ _____ _____ | | |
| 902 | I have asked you about many difficult things. How has talking about these things made you feel.....? WRITE DOWN ANY SPECIFIC RESPONSE GIVEN BY RESPONDENT _____ | GOOD/BETTER..... 1 BAD/WORSE 2 SAME/ NO DIFFERENCE . 3 | |
| 903 | Would you like to be interviewed again on these women's health issues next month? | Yes.....1 No.....2 | |

| | |
|---------------|--|
| FINISH | |
|---------------|--|

I would like to thank you very much for helping us. I appreciate the time that you have taken. I realize that these questions may have been difficult for you to answer, but it is only by hearing from women themselves that we can really understand about their health and experiences of violence.

IF RESPONDENT HAS DISCLOSED PROBLEMS/VIOLENCE: From what you have told us, I can tell that you have had some very difficult times in your life. No one has the right to treat someone else in that way. However, from what you have told me I can see also that you are strong, and have survived through some difficult circumstances.

Here is a list of organizations that provide support, legal advice and counselling services to women in HARARE. Please do contact them if you would like to talk over your situation with anyone. Their services are free, and they will keep anything that you say private. You can go whenever you feel ready to, either soon or later on.

904 RECORD TIME OF END OF INTERVIEW: Hour [][] mm [][] (24 h)

Interviewer Comments (after interview)



Appendix L: PhD Conference papers and posters

1. Simukai Shamu, Naeemah Abrahams, Marleen Temmerman, Christina Zarowsky. Harmony or Harm? Unpacking the effects of HIV testing and disclosure during pregnancy on intimate partnerships in Zimbabwe. Poster presented at the XIX International AIDS Conference in Washington DC, USA, 22-27 July 2012
2. Simukai Shamu, Christina Zarowsky, Marleen Temmerman, Naeemah Abrahams. Prevalence and risk factors for Intimate Partner Violence after HIV testing and disclosure in Zimbabwe. Poster presented at the XIX International AIDS Conference in Washington DC, USA, 22-27 July 2012
3. Simukai Shamu, Naeemah Abrahams, Marleen Temmerman, Christina Zarowsky Intimate partner violence during pregnancy in Africa and Zimbabwe: Does qualitative data explain prevalence and risk factors? Paper (oral) presented at the University of the Western Cape HIV In Context Annual International Symposium on New Research on Gender, Violence and HIV, School of Public Health, University of the Western Cape , Cape Town, South Africa, 28- 29 March 2011
4. Simukai Shamu, Naeemah Abrahams, Marleen Temmerman, Christina Zarowsky. Are Zimbabwean midwives ready? Exploring opportunities and obstacles to screening pregnant women for intimate partner violence during antenatal care in Zimbabwe. Paper presented at the 7th Public Health Association of South Africa (PHASA) Conference, Johannesburg, South Africa, 28 - 30 December 2011
5. Simukai Shamu, Naeemah Abrahams, Marleen Temmerman, Tamara Shefer, Christina Zarowsky. That pregnancy can bring noise into the family. Exploring intimate partner sexual violence during pregnancy and intersections with HIV infection in Zimbabwe. Abstract published in the proceedings of the International Society for the Study of Culture and Sexuality (IASSCS) VIII conference on Naming and Framing: The making of Sexual (In)equality, Barcelona, Spain, 6-9 July 2011
6. Simukai Shamu. Public Health Education and HIV Research. Directions and Redirections in Zimbabwe. Paper (oral) presented at the University of the Western Cape's HIV In Context Annual International Symposium on. Public Health in the Age of HIV: Reflections and (Re?)Directions, School of Public Health, University of the Western Cape, Cape Town, South Africa 28-29 March 2010
7. Simukai Shamu, Naeemah Abrahams, Marleen Temmerman, Alfred Musekiwa, Christina Zarowsky. A systematic review of African studies on Intimate Partner Violence against pregnant women: prevalence and risk factors. Poster presented at the XVIII International AIDS Conference in Vienna, Austria, 18-23 July 2010

Appendix M: Papers published, in press or submitted

